Guitar
MAGAZINE

APRIL 2021
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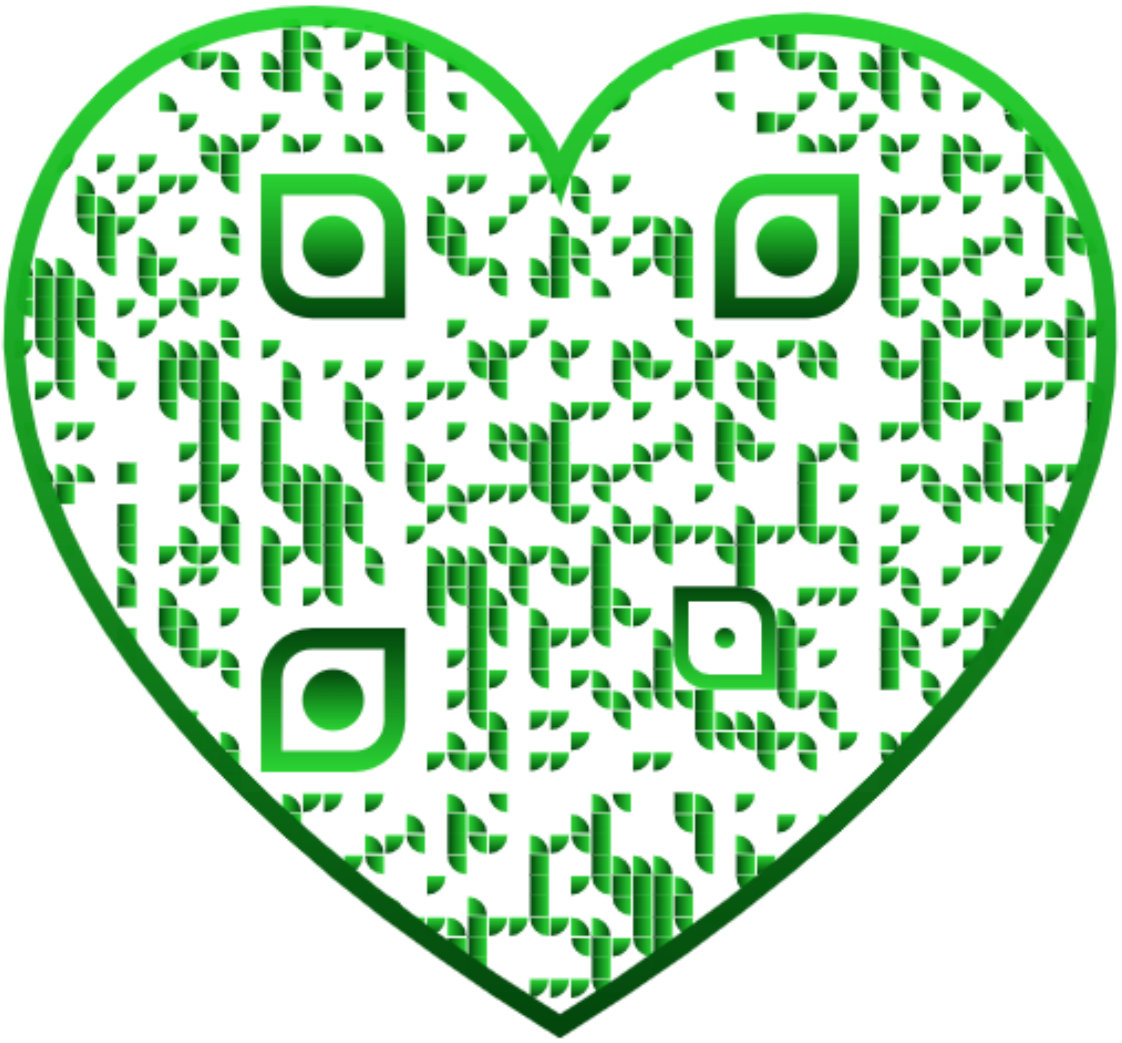

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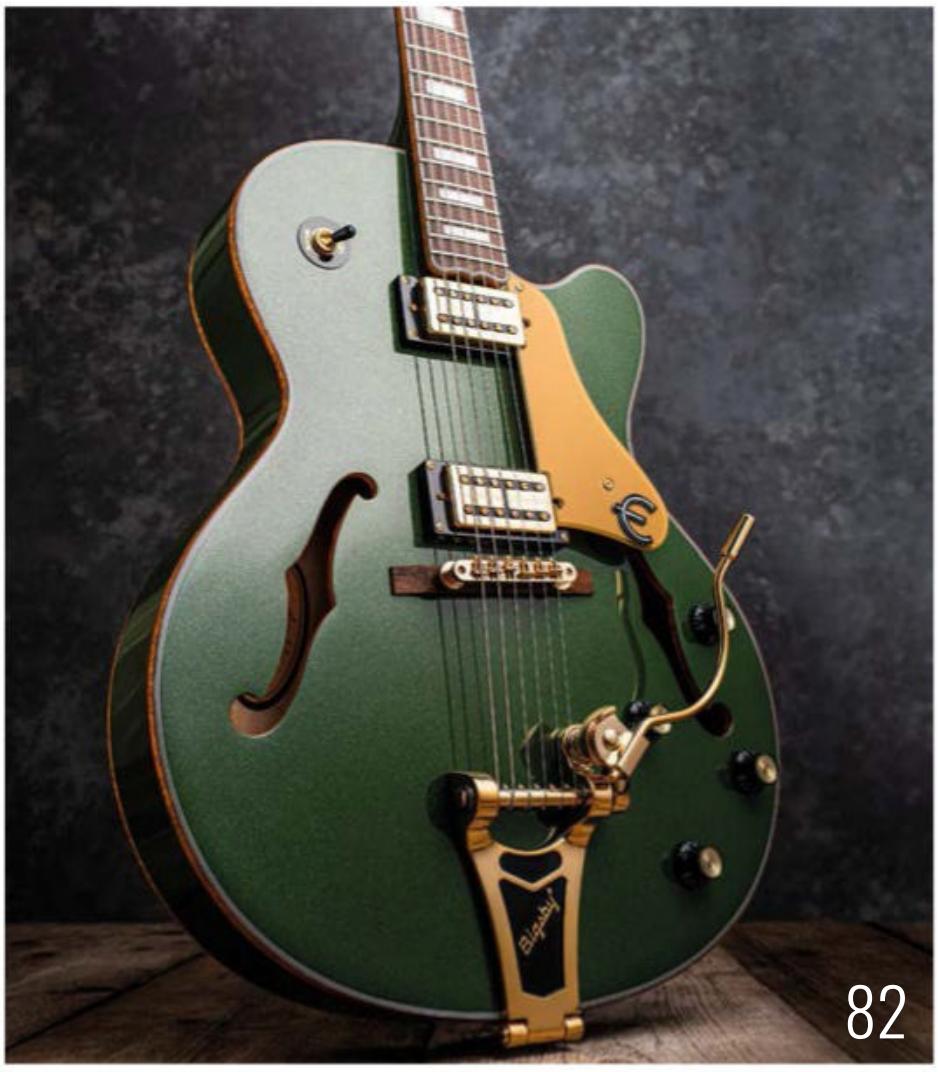
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EDITOR'S LETTER

COME AS YOU ARE

It's no exaggeration to say that, were it not for Nirvana, I wouldn't be typing this. I can't claim to have been in the moshpit for their set at Reading '91 – it was probably a little too dangerous for an 11-year-old – but when I formed a band with my friends a few years later, it was Kurt Cobain, Krist Novoselic and Dave Grohl who provided the blueprint for pretty much everything.

I'd picked up the guitar prior to the grunge explosion and, thanks to the dubious influence of older friends and family members, I was the only kid at my primary school disco asking the DJ to play Guns N' Roses instead of New Kids On The Block. GN'R were exciting and dangerous, they sang about things I didn't understand and my mum definitely didn't like some of the words they used. But playing like Slash was *hard*. I carried on listening primarily to loud rock music but for the next few years played far less guitar and a lot of computer games instead.

Then came Nirvana – and one of the beautiful things about them was the simplicity of the building blocks they used. Of course, millions of teenage guitarists like me were soon to discover that playing their songs was a lot easier than writing material of your own that was anything like as infectious or successful. But the point was that all you needed were powerchords, a distortion pedal and a couple of like-minded friends in flannel shirts and you were good to go. And it was *fun*.

Like punk before it, grunge kicked the door down for a generation of musicians alienated by virtuosic muso culture and the industry benefitted from a huge influx of new players as a result. It wasn't just about technical proficiency either; many of the main protagonists of the grunge movement also rejected the machismo and misogyny of the mainstream rock orthodoxy and worked hard to make the music world a more inclusive place. Here in 2021, there's still plenty of work to do on that front – witness the hand-wringing in response to Phoebe Bridgers' recent *SNL* performance and ask yourself whether a male artist would have generated a similar reaction – but this month we're winding the clock back three decades to find out how grunge changed guitar forever.

Chris Vinnicombe
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Guitar CONTRIBUTORS

To coincide with our cover story on 30 years of grunge, we asked our contributors and team members to talk us through their top grunge guitar moments and memories

DARRAN CHARLES

HANDY MAN

Though it was Richie Sambora that made Darran pick up the guitar, it was Steve Vai's exotic style that ensured he'd keep at it. For this issue, Darran got to grips with a pair of Corts. "In principle, active pickups are a tonal anathema," he says. "In practice, they continue to neutralise my prejudices. That was the case with the EMG Super 77s in the KX300." Read more on p86. When it comes to grunge guitar, Darran has a clear favourite too. "I struggle to equate Soundgarden with grunge but the moment I heard *Hands All Over* in the early 1990s I was hooked."

DAVE HUNTER

EARLY ADOPTER

A founding member of Drugstore in the early 1990s, Dave was into grunge years before it became a global phenomenon. He recalls being back home in Cincinnati for NYE 1990 and seeing The Afghan Whigs at Bogart's. "It was a year and three quarters before *Nevermind* came out," he says, "but it felt like grunge had landed." Flip to p106 to read Dave's profile of Bartlett Guitars. For him, Bartlett's Burst-style Retrospec ticks all the boxes while looking original enough to confidently escape the clone market. "To me, that's a significant achievement."

SOPHIE McVINNIE

RIFF WORSHIPPER

A third-year journalism student and a classically trained flautist with an eye for classic rock guitar, Stirling-based Sophie frequently publishes writings on her music blog Second Hand News. For this issue, we had her speak to an online sensation with whom she shares a name. "It was cool to hear her talk about what it means to pave her way as a female in a male-dominated industry," says Sophie. Go to p14 to find out who it is. Sophie's greatest grunge guitar moment? "I like the way *Milk It* by Nirvana has a jarring intro that turns into a huge, distinctive riff."

PHIL MILLARD

DESIGN GURU

Art editor Phil learnt classical guitar at a young age but never had the discipline to play like the metal guitarists he listened to in the late 1980s. "Good job grunge came along," he says. "It was liberating to feel like I could play guitar any way that I wanted!" Along with chief editor Chris, Phil helped toast *Nevermind*'s 15th anniversary for another mag back in 2006. Here, 15 years later, they salute it again. "I loved designing the grunge feature," says Phil. "It gave me an excuse to dig out my old copies of *Ray Gun* and pay homage to designer David Carson."

HUW PRICE

SUB POP PRISONER

Guitar tech and former studio engineer Huw's most meaningful grunge memory is of a cold and dreadful journey between Dresden and Prague in 1993 – scored by Steven Jesse Bernstein. Two gigs into his first European tour, Huw hadn't slept for three nights. "I was chilled to my bones, hallucinating and feeling a thrilling sense of dread," he says. "*Prison* was the perfect soundtrack." For something only marginally less frightening, flick to p113 to have Huw walk you through fitting a neck humbucker to a Blackguard Telecaster – if you dare.

DANIEL SEAH

SEATTLE COUCH SURFER

Singapore-based guitarist Dan has been playing for almost 20 years and is practically inseparable from his grunge-attuned MIJ Fender Jazzmaster. Alongside handling the latest news for *Guitar.com*, he devotes plenty of time to his band YOY, who have had the privilege of playing a handful of iconic grunge haunts. "Seattle has strange ways of reminding you of its grunge ghosts," says Dan. "YOY hosted a festival at the Seattle Center and, in the green room, we sprawled out on a couch donated by Eddie Vedder."

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FRETBUZZ

Your letters and observations on the world of guitar

Join the conversation Email us at editors@guitar.com

WATT'S GOING ON?

Dear *Guitar.com*, I have a question regarding the article you published on building your own L-pad attenuator [head to *Guitar.com* to read it for yourself]. In the guide, you selected a eight-ohm 50-watt resistor. I was wondering if there was any reason why you couldn't use a 100-watt resistor instead? While I'm by no means an electronics expert, I would think that using a 100-watt would allow you to absorb more power than the 50-watt would? I was planning to use a 100-watt resistor for my attenuator build – and also using a slightly larger enclosure to include a small 12-volt fan for cooling – but I want to make sure that I'm not missing anything before I take the plunge!

GARY WOBIG, VIA EMAIL

Huw Price replies: *Hi, Gary. I assume when you say "resistor" you're referring to the L-pad? If so, then you're correct that you're fine to use a 100-watt one. The only reason I used a 50-watt in the original build is simply because the lower-power ones are cheaper and my most powerful amp is 20 watts, so 50 watts was more than enough for my needs. You're quite right in saying that the 100-watt L-pad can absorb more power. If that's what you need, then that's what you should use. Best wishes with the build.*

BEGINNER'S LUCK

Hi there. Having decided to learn to play the guitar at the ripe old age of 62, just before the first lockdown in March 2020, I bought myself a Fender guitar and amp and booked myself in with a reputable guitar tutor.

Phoebe Bridgers, guitar intact, at Colorado's Red Rocks Amphitheatre, 2020

Having not been able to have my lessons due to ongoing restrictions, I subscribed to your excellent magazine.

Although a great read and informative, I wondered if there would be any hope of seeing a regular article for beginners, however small, as I feel more than a little bamboozled by some of the jargon used. I am sure that, during this difficult time, there are many like me who have decided to pursue a hobby that up until this point they haven't had time for. Therefore any basic information would be gratefully received. Thanks in anticipation.

KEV MILLER, VIA EMAIL

Hi, Kev. Thanks for your email and welcome to the wonderful world of guitar – you're never too old (or too young) to become part of the club! Thanks also for giving us food for thought about something that would help newbies such as yourself understand the jargon used throughout the mag. Whether it's technique or gear, there sure are a lot of terms that most of us who've been in the business for a while take for granted. As it's our aim to make this wonderful instrument accessible and welcoming for all, something that explains some of these guitar-centric terms is a great idea – stay tuned!

FROM SOCIAL MEDIA

Back in February, Phoebe Bridgers caused a stir when she smashed a Danelectro guitar at the end of her performance on US TV show Saturday Night Live. This timeless display of rock 'n' roll abandon polarised the guitar world, with everyone from Dave Grohl to David Crosby having their say on whether guitar-smashing is a good thing. And so did you…

Who cares, if she wants to smash her gear up let her. Isn't it about time these young-uns started acting like rock stars?

JORDAN LEVISON

I cringe when people wreck perfectly good instruments. It's such a common gimmick, it takes away from the music. Donate these guitars if you really want to get rid of them! Or at least use a guitar that's going bad.

JAKE COTE

It certainly would be better if it was donated for a good cause instead of being destroyed.

MARIO NEYT

It's her guitar and she can do whatever she likes with it!

AARON FRENCH

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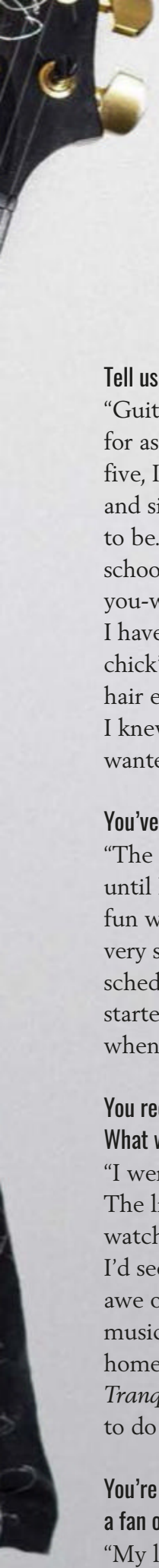
ONES TO WATCH

SOPHIE BURRELL

WORDS SOPHIE McVINNIE

From starting a YouTube channel to writing her first single, 21-year-old Sophie Burrell tells us how she went from idolising Mark Tremonti to earning her very own PRS endorsement



Tell us about growing up as a guitar fan.
"Guitar has been a really big part of my life for as long as I can remember. When I was five, I watched the movie *School Of Rock*, and since that age I knew what I wanted to be. You know when you're in primary school and they have those dress-as-what-you-want-to-be-when-you-grow-up days? I have a distinct memory of going as 'rock chick' and my mum putting in colourful hair extensions and stuff like that. So I knew from a super-young age that I wanted to be in the music industry."

You've really built an audience via social media...
"The social stuff didn't come into play until later on. I started making videos for fun when I was maybe 14. I didn't take it very seriously and I wasn't on an uploading schedule or anything like that. It only started becoming a serious thing, I'd say, when I was 18 or 19."

You recently released your first single, *Tranquility*. What was the inspiration behind it?
"I went to see a gig in October 2019. The line-up was Periphery and Plini. I was watching Plini's set – this was the first time I'd seen him – and I was just absolutely in awe of it. I was like, 'How can instrumental music be so captivating like this?' I went home the next day and started writing *Tranquility*, because I was like, 'I want to do something like that!'"

You're a PRS artist. How long have you been a fan of the brand?
"My love for PRS goes back quite far. I first saw PRS when I saw one of my idols, Mark Tremonti, playing PRS guitars and I was absolutely captivated by the birds on the fretboard. I was like, 'What are those guitars? I want one. That's crazy!' So, then I started looking into it when I was about 12. I was going to get a Tremonti signature PRS. I saved up all my lunch money for about a year or two and I got one. That's where the love started."

What about amps and pedals?
"I've got quite a few different amps I'm using but my main one for my live rig is an EVH 5150 100-watt head. My pedal setup changes quite a lot. I'm not too sure what's going to happen when I'm finally able to play live again! At the moment, I'm using a lot of plugins to get the tone I want. I have some functional things – my tuner, reverb and delay, which are my favourite effects.

"I WAS ABSOLUTELY CAPTIVATED BY THE BIRDS ON THE FRETBOARD. I WAS LIKE, 'WHAT ARE THOSE GUITARS? I WANT ONE. THAT'S CRAZY!'"

A little bit of chorus maybe, a noise gate and a clean boost are the main ones you'd see if you looked at my pedalboard. I use some TC Electronics, some Boss and some MXR units."

Instrumental guitar has traditionally been a male-dominated space. Do you feel that it's starting to change?
"It's so great to see new female guitarists popping up around the place because it's easy to get discouraged by male dominance. The audience that comes with it can be quite discouraging at times – a lot of, 'She's good – but for a girl' sort of stuff, which is really crap. But I think it's better to take it in your stride and use it as motivation to be like, 'Yeah, I'm good but not just for a girl. I'm good because I work hard!' I want to be competing with the guys. Why should I not be?"

What's next for you?
"I have two main projects that I'm working on – one of them more than the other – which might surprise you. I actually don't have any other songs in the line-up for my virtuoso-instrumental project because, for the past year, I've been working really hard on songwriting and getting demos together for a different project which I want to front. We've got an EP's worth of demos together now. Not many people know about this but the aim is to be a band and take to the live scene, once everything becomes live again."

Follow Sophie on Instagram @sophieburrell1

THE PLAYLIST

ALBUM SPOTLIGHT

ARIEL POSEN
HEADWAY

INTERVIEW SAM ROBERTS

The Canadian slide maestro shares the guitar highlights from his latest album, where he draws beautiful melodies from interesting places by melding traditional techniques with modern effects

Though he's perhaps best known for his searing slide licks, Ariel Posen prioritises songcraft above all else on his sophomore album *Headway*. Composed between tour dates in support of his debut album *How Long*, each of the 12 songs on *Headway* were trialled, tested and moulded into shape on the road during shows across the UK, Europe, the US and in his native Canada. Switching between his beloved signature Mule guitar and a Josh Williams Mockingbird, he finds new dynamics and spaces within each song, working against his intuition to pull out off-kilter melodies and soaring lead lines. Here, he outlines his *Headway* highlights.

WHAT ARE WE DOING HERE

"The main guitar-comping part and solo really jump out at me. I tried experimenting a lot on this album with new sounds and different avenues to chase down what I was hearing in my head. I landed on a sound that was a cross between a wah clav and steel drums. Putting a King Tone Minifuzz first in my chain and running it dry but with the Eventide H9 and some slap delay (Chase Bliss Tonal Recall), the sound was born. The sound itself actually inspired the voicings for the chords. The song is worked around the pulsing movement of the rhythm section for a leftfield sound. The guitar is my Mule Stratomule into my Two-Rock Traditional Clean, and the solo was the same sound. However, we experimented with the room mics. Rather than focusing on the close mics on the amp, each time the solo dynamics and intensity build up, we raised the volume of the room mics to create more depth and space while still adding volume."

NOW I SEE

"The solo section on this song is a real standout for me. It probably sounds like a guitar solo with a rotary effect, which is true, but there was a lot more that went into it than that. I'm always trying to tell a story and play something that's melodic so that it's memorable and anyone can hum along to it. I feel like it went down an interesting route while still sneaking in some more traditional/classic blues licks. I was playing my Josh Williams Mockingbird into my Two-Rock. For the Leslie sound, I used the H9 – as I usually do. However, I really wanted it to be as percussive as possible, as I find that it's easy to lose the attack and the body when you're using an effect like that. I recorded the solo with the effect as is and then I doubled it note for note exactly the same but without the effect and without any overdrive so that it gave it more body and headroom."

I'LL BE FINDING YOU

"The rhythm part was the first musical idea I had when I wrote this song. I was inspired by two Thundercat songs: *Lava Lamp* and *Them Changes*. Both have a very heavy and mechanical offbeat-driven rhythm to them. The more I messed around with it, I wanted the tone and the rhythm part to sound and feel like a machine in a factory. The gear was my Fender Jazzmaster into the Two-Rock. The big components for the sound were slap delay from the Tonal Recall and harmonic trem from my Victoria Reverberatto (Frank The Tank). I'm really happy with the how that part turned out because, again, it's different and it helps keep the feel trucking along with the rhythm section while not sounding like a typical offbeat. Something about Jazzmaster pickups give a brighter than normal attack. But in this context, it worked well with its percussiveness."

IT'S YOU

"I wanted a guitar part that sounded like something you could play on a mandolin but also on a piano. Lots of hammer-ons and pull-offs while using open droning strings. The setup was my Mule Resonator with a couple microphones on it, going into my Reverberatto and a Victory V40 with a little bit of break-up. The result is a sound that's acoustic but not acoustic, electric but not electric – a weird hybrid. It's definitely the focal point of the song. I love how percussive that instrument is, as every inflection and nuance comes across, which includes the not-so-good nuances. I like to call them the perfect imperfections. That's what adds character to music in my opinion."

HEART BY HEART

"The main guitar part throughout this song is what kick-started it all. I was messing around with a bluesy rhythm but I wanted to give it a different flavour that hadn't really been used yet. What ended up delivering that was my Mule with the H9 and my Broadcast AP. When the slide was used in the choruses, it seemed to react differently than with fingers. The sweep of the filter is incredibly dynamic and was satisfying to play. I knew this would be the first song on the record, as it's been the first song in my live shows. I wanted to come out of the gate with something leftfield and unexpected sonically yet still familiar musically."

Headway is out now.

This month's essential tracks for guitar lovers

KING GIZZARD & THE LIZARD WIZARD
O.N.E.

Opening with sultry harmonica and bells, Gizzard once again blur genres in a track that's equal parts Primal Scream and Captain Beefheart, bolstered by the band's customary microtonal guitar melodies.

ARLO PARKS
Caroline

Taken from the 20-year-old's debut LP *Collapsed In Sunbeams*, the undulating arpeggio that frames this wonderful slice of observational songwriting is straight out of the Greenwood/O'Brien textbook.

PINEGROVE
Amperland, NY

Filled with emotive vocal harmonies and sweet arpeggiated guitar parts, this track comes from the band's new LP, which is named for their home town, and features and accompanying film.

SMITH/KOTZEN
Taking My Chances

Iron Maiden legend Adrian Smith teams up with virtuoso Richie Kotzen on this new side project. The pair waste no time tearing it up with monstrous riffs, searing octave lead parts and killer dual-guitar solos.

ROYAL BLOOD
Typhoon

The chart-topping duo return with a track that leans into pop more than you'd expect, but there's still space for an achingly cool fuzzed-out bass riff that's accentuated by hand claps and a chorus-soaked guitar part.

MADISON CUNNINGHAM
Broken Harvest

The guitarist's first new music since her Grammy-nominated debut finds her ditching bluesy leads for spiralling effected guitar loops that suggest a new and more experimental direction for the 25-year-old.

KINGS OF LEON
Echoing

As a snapshot of new album *When You See Yourself*, this track will please fans of the band's pre-arena early works. Matthew Followill's Coronet sounds gnarly and twists splendidly around the marching drums.

JULIAN LAGE
In Circles

Performed solo from his couch to show off his new signature Collings model, Lage once again proves that he's one of the greatest jazz players of our age. Nuanced and emotive, this is not one to be missed.

FOO FIGHTERS
Making A Fire (Live)

Recorded live at Dave Grohl's Studio 606, the Foos teased the atmosphere of their new 'party album' with this high-energy version of its opening track. Expect big guitars and even bigger vocals.

TIGERCUB
Beauty

The Brighton band return with one of the best riffs of 2021 so far, matching QOTSA pomp with the slick in-the-pocket drum sound. If you're looking for a new guitar band to get into this year, look no further.

GRETA VAN FLEET
Heat Above

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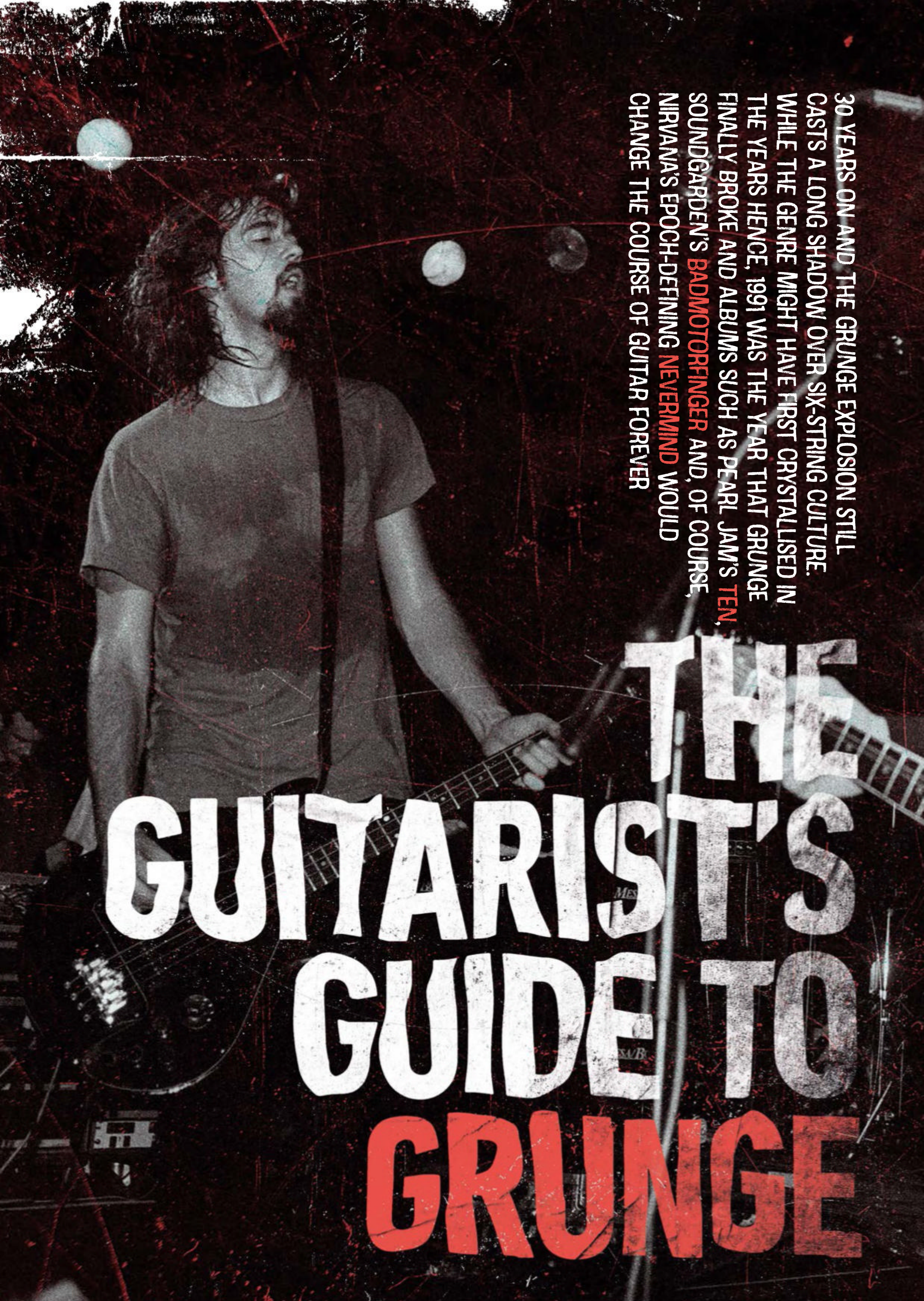

30 YEARS ON AND THE GRUNGE EXPLOSION STILL CASTS A LONG SHADOW OVER SIX-STRING CULTURE. WHILE THE GENRE MIGHT HAVE FIRST CRYSTALLISED IN THE YEARS HENCE, 1991 WAS THE YEAR THAT GRUNGE FINALLY BROKE AND ALBUMS SUCH AS PEARL JAM'S TEN, SOUNDGARDEN'S BADMOTORFINGER AND, OF COURSE, NIRVANA'S EPOCH-DEFINING NEVERMIND WOULD CHANGE THE COURSE OF GUITAR FOREVER

THE GUITARIST'S GUIDE TO GRUNGE

If you want to feel old, remind yourself that 2021 marks 30 years since grunge went overground and, led by Nirvana, a score of revolutionary bands became household names and inspired millions to pick up the guitar and play it in a way that was altogether more angular and noisy than what had come before. By way of comparison, go back 30 years from 1991 and The Beatles had yet to sign a record deal, the Stones hadn't even formed and Britain's biggest guitar hero was Hank Marvin. Talk about "too much fucking perspective"…

But even with so much distance between now and then, grunge remains a truly important and significant moment in the history of our instrument. The brazen shenanigans of Britpop may have spawned an epidemic of young men in Adidas Gazelles reaching for Sheratons but it famously never really travelled well beyond these shores. There's an argument, therefore, that grunge was the last truly global phenomenon in guitar culture.

Grunge changed music, fashion, guitar aesthetics, gear trends – and these are all changes that still reverberate to this day. Check out the many bright young things of 2021 who are drawn to the offset guitars that grunge players used primarily because they were, at the time, unpopular enough to offer excellent bang for buck. Grunge didn't come out of nowhere, of course. Change from the predominant 1980s trends – hair metal, winsome indie, slick virtuoso twiddling – had been coming for a while. But no-one perhaps expected such a shift for the new so-called Generation X.

But in our enthusiasm to canonise and in some cases pigeonhole a genre, it's all too easy to focus on the big bands and forget that another important facet of grunge was its diversity. It was a 'movement' of often strange bedfellows united by little more than geography or the desire to do something different with the guitar. Even if only a select few would become megastars, all had their impact on what would come afterward, leading to a family tree that stretches further and wider than anyone could have anticipated.

Many of those bands – and sadly, some band members – have since left us but forgive us some nostalgia as we revisit the artists, records and instruments that saw grunge, 30 years ago, in bloom…

WORDS MICHAEL LEONARD

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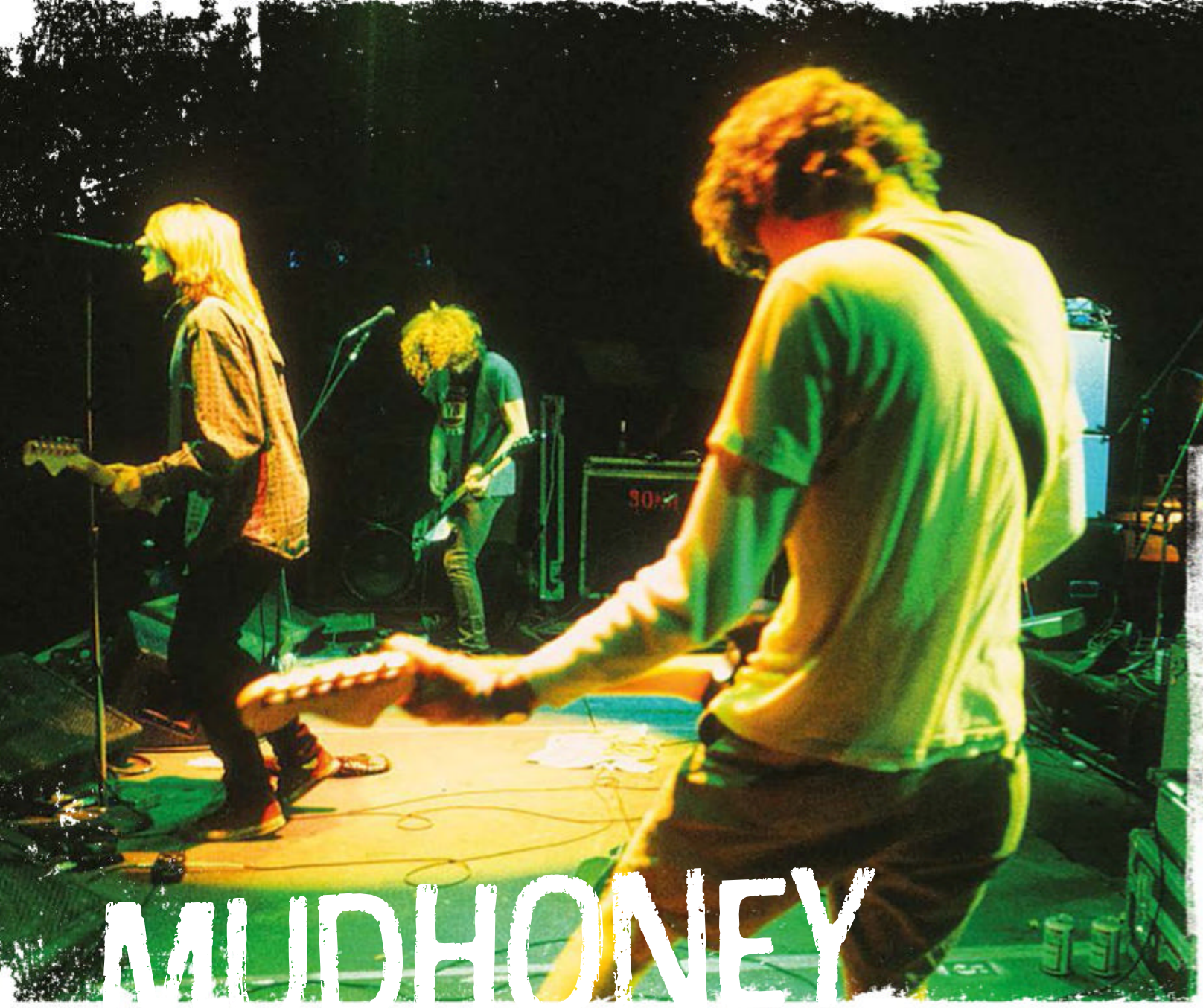


Mudhoney thrashing California's Castaic Lake Natural Amphitheatre in September 1992

© Lindsay Brice / Getty Images

MUDHONEY

ESSENTIAL LISTENING: *Superfuzz Bigmuff* (1988), *Every Good Boy Deserves Fudge* (1991)

KEY GEAR:

MARK ARM: Gretsch Silver Jet. 1960s Hagstrom III. Ibanez Soundtank FZ5 60s Fuzz. DOD Overdrive Preamp 250. **STEVE TURNER:** 1960s Guild Starfire IVs. 1970s Fender Competition Mustang. EHX Big Muff Pi. Foxx Tone Machine.

Mudhoney may be the true unsung heroes of grunge, the flannel brigade's prophets without honour. They were namechecked by their Seattle peers from the start – Kurt Cobain was particularly enthusiastic – but the reality of their ongoing career is that they've only ever had one album even chart in the US's Billboard 200. Yet they *were* trailblazers. Vocalist and guitarist Mark Arm and lead guitarist Steve Turner formed Mudhoney from the ashes of another cult punk outfit, Green River (who also featured Pearl Jam's Stone Gossard and Jeff Ament). Drummer Dan Peters would briefly moonlight for Nirvana, pre-Dave Grohl. Mudhoney's early photographer was a just-graduated Seattle local, Charles Peterson, future imager-in-chief for a slew of bands. When it comes to grunge's gnarled family tree, Mudhoney appear to be the trunk.

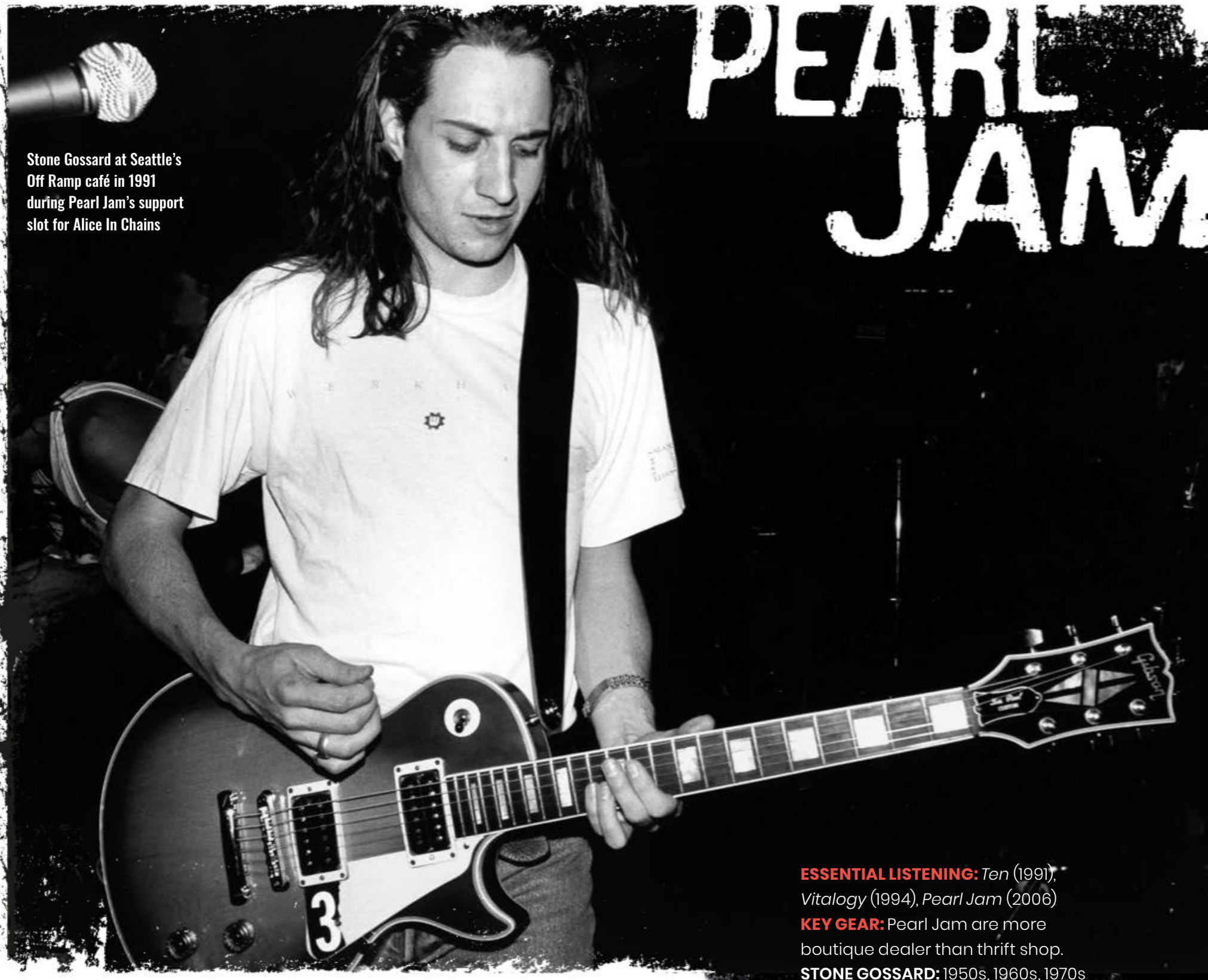
The band formed in 1988, releasing their debut single *Touch Me I'm Sick* just three months later. It was a two-and-a-half-minute, Stooges-like blast. "There's something special about that first single," Mark Arm later recalled. "We were never quite able to recapture that sound. I don't know if it was the guitars or the recording. It was just a really gnarly, gnarly guitar sound. It had more to do with the actual electromagnetic chemistry of what was going through our amps that day. It was just a cool, fried-out sound." That "fried out" sound was down to a maxed-out Electro-Harmonix Big Muff pedal, and Mudhoney soon became synonymous with the art of fuzz. The act's following EP *Superfuzz Bigmuff* was even named after their favourite stompboxes. Steve Turner is clear about the grunge aesthetic being born of outcasts and cast-offs. "Garage punk, and punk rock in general," he says, "a lot of it was made with cheap gear, and a lot of it was reclaiming gear that guitarists had kind of dismissed as garbage, like the [Fender] Mustang. That was my ultimate guitar back when I was a kid, but it was pooh-poohed when I finally got one. I could get them for $150." You can keep your Floyd Rose locking trems and scalloped fretboards, Mr Widdle… a new/old way of thinking had begun.

DINOSAUR JR

Joseph 'J' Mascis' offhand-slacker persona occasionally had him painted as something of a wastrel in the media but that is *so* wrong. From breakthrough 1988 album *Bug*, which opened with stone-cold classic *Freak Scene*, through the 1990s, Mascis proved himself an exceptional player who can rip screechingly discordant punk solos but also showcase the melodic nous of one of his unlikely heroes, Deep Purple's Ritchie Blackmore. "When I play a solo I'm just expressing that moment," says Mascis. "It can go horribly wrong easily enough. Some nights you can pull stuff off, other nights you can't. But you don't know until you try." He's also a crisp rhythm player. Over the years, Mascis has guested on records by Sonic Youth, Buffalo Tom, Gumball, Mike Watt, Firehose and many others, making him noise-rock's big hairy Zelig. In more recent years, he's increasingly turned to acoustic music – and he nails that too, being an impressively adept fingerpicker.

ESSENTIAL LISTENING: DINOSAUR JR: *Bug* (1988), *Where You Been* (1992) J Mascis (solo): *Martin & Me* (1996), *Several Shades Of Why* (2011)

KEY GEAR: Fender Jazzmasters, Esquire, Custom Shop Thinline Telecaster. Gibson Les Paul Jrs ("the P-90 is my favourite pickup"), Hummingbird. Martin D-28. EHX Big Muff Pi, Small Clone, Deluxe Memory Man. Lovetone Big Cheese, Meatball. Real McCoy Custom Wah… Such is Mascis' effects obsession that he even has a mini-pedalboard that he can take as hand-luggage when he travels via plane. It's packed with an Ibanez Analogue Delay Mini, Mooer Eleclady flanger, Keeley Red Dirt overdrive, D-Sound '73 Ram's Head Fuzz (and Wren & Cuff replica) and more…



Stone Gossard at Seattle's Off Ramp café in 1991 during Pearl Jam's support slot for Alice In Chains

© Alison Braun / Michael Ochs Archives / Getty Images

ESSENTIAL LISTENING: *Ten* (1991), *Vitalogy* (1994), *Pearl Jam* (2006)
KEY GEAR: Pearl Jam are more boutique dealer than thrift shop.
STONE GOSSARD: 1950s, 1960s, 1970s Gibson Les Pauls, 1960s ES models. Vintage Fender Stratocasters. Dunlop wah, MXR Super Comp and Phase 90. Ibanez Tube Screamer.
MIKE MCCREADY: 1950s Fender Strats and Teles. 1959/1960 Gibson Les Paul Reissues, original 1956 Les Paul, '59 Burst and more. Dunlop MXR wah, Phase 90 and Carbon Copy delay. Ibanez Tube Screamer. Way Huge Green Rhino overdrive.

Of all the bands that broke big in 1991, Pearl Jam have been the most enduring. Guitarist Stone Gossard and bassist Jeff Ament had been together before in proto-grungers Green River, Mother Love Bone, and Temple Of The Dog, picking up alliances along the way. The Seattle scene was rife with collaborations in the late 1980s, and while MLB's Matt Cameron went off to Soundgarden, guitarist Mike McCready stuck around and, once they picked up vocalist/occasional collaborator Eddie Vedder, Pearl Jam was born. They only settled into solidity in 1990 but by the end of 1992, the success of debut album *Ten* (released in August 1991) meant that Pearl Jam had become one of the US's biggest rock bands. They haven't budged since.

Lyrically speaking, *Ten* was almost grunge by numbers, covering dark subjects such as depression, suicide, loneliness and murder. But Pearl Jam's sound was more traditionally classic rock than some of their punkish peers, which gave them a much broader appeal. Their anthemic, intentionally epic songs boast plenty of guitar soloing, and a war of words soon broke out about Pearl Jam's grunge credibility: one *NME* review said that Pearl Jam were "trying to steal money from young alternative kids' pockets" and Nirvana's Kurt Cobain angrily attacked Pearl Jam, claiming the band were "commercial sell-outs" (though they reconciled before Cobain's death). But the fans didn't care: *Even Flow*, *Jeremy*, *Alive*, *Daughter*, *Spin The Black Circle*… bruising hits came quick in the early years and album sales and tours were huge.

Gossard and McCready were never punk iconoclasts, in truth. Gossard tends to be the riffman, tuning to open D. But McCready's quite the traditional lead. "We're pretty opposite as players, so we complement one another," says Gossard. "It's a trade-off between us. You'll hear Mike's guitar come up for the solos. But there are a lot of songs where my rhythm parts are playing the main riff."

McCready admitted early on to being a fan of SRV and KISS, which wouldn't have cut the mustard in Mudhoney. But impressively, Pearl Jam have remained a solid unit. Coming out of a scene too often characterised by splits, troughs and deaths, any 30-plus-year career in grunge is tough to argue with. They keep their fans onside with activism and 'official' bootlegs. An even flow, indeed.

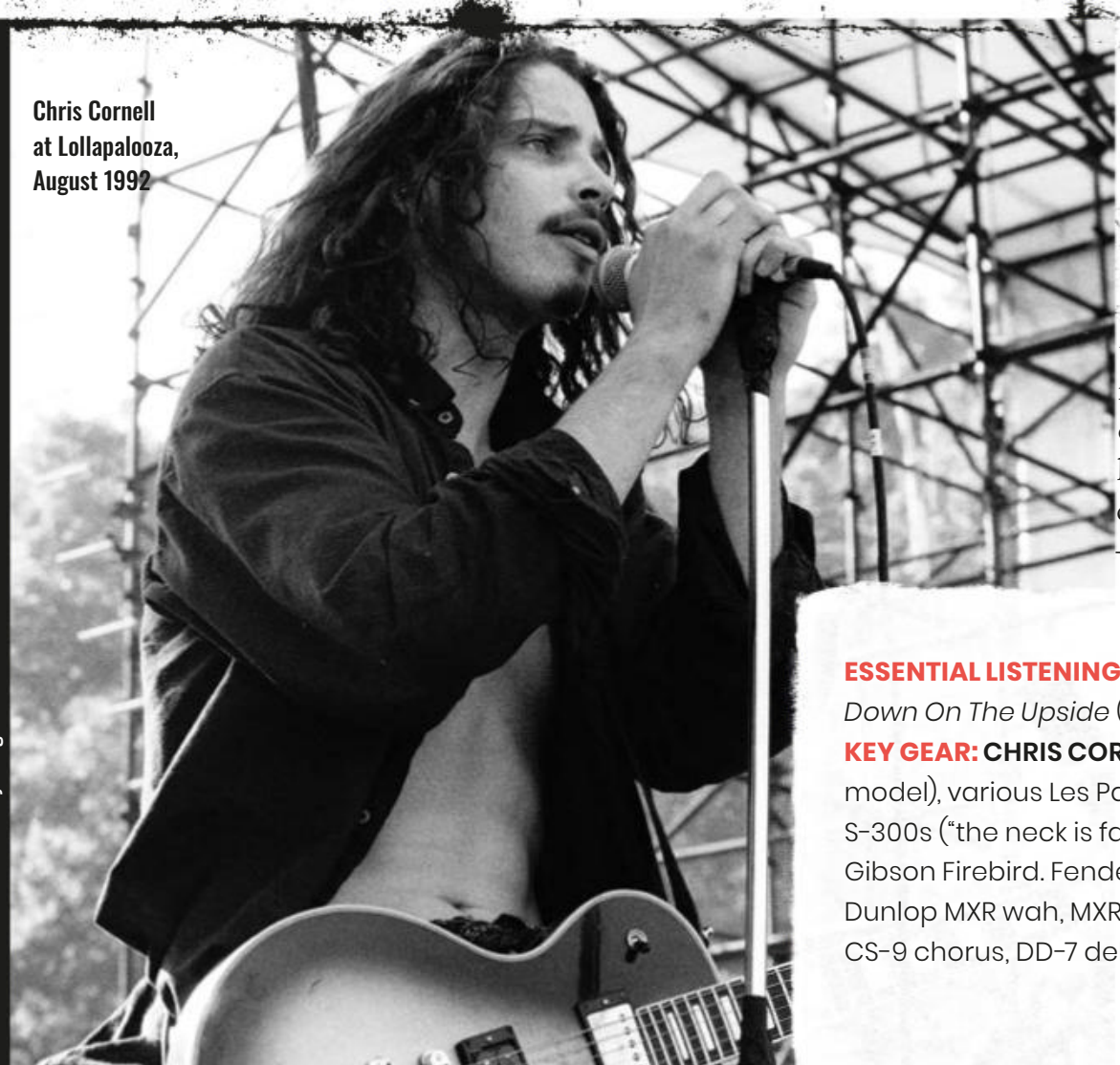
Sonic Youth at that same Castaic Lake Natural Amphitheatre show in 1992

© Lindsay Brice / Getty Images

SONIC YOUTH

New York's Sonic Youth were never a 'grunge' band, of course, but their influence lies as heavy across the whole scene as a sodden Seattle autumn. They were the ostensible stars of *1991: The Year Punk Broke*, Dave Markey's enormously important documentary that chronicled the band's 1991 European tour, and also featured Nirvana and Dinosaur Jr. The kids just loved the Youth. *Daydream Nation* (1988) was where their avant-garde stylings became more accessible, even if its opening salvo *Teen Age Riot* was still in the act's trademark crazy tunings: Thurston Moore is in GABDEG, Lee Ranaldo in GGDDGG. But it's a relatively straightforward rocker nonetheless, celebrating a scenario in which J Mascis is the President of the US (something that seems much less absurd now than it did 30 years ago). Moore and Ranaldo also did much for the rehabilitation of the Fender Jazzmaster in noise-rock, and both would go on to get their own signature models.

ESSENTIAL LISTENING: *Daydream Nation* (1988), *Dirty* (1992)
KEY GEAR: **THURSTON MOORE:** Fender Jazzmasters, Jaguars, Mustangs, Electric XII. EHX Sovtek Civil War Big Muff. ProCo Turbo RAT. MXR Phase 90, Blue Box fuzz. **LEE RANALDO:** Fender Jazzmasters, 'Jazzblasters', Mustangs, Jaguars, Telecaster Deluxe and Thinline, Electric XII. Deimel Lee Ranaldo Custom 12-String. MXR Blue Box. Mutron Bi-Phase.



Chris Cornell at Lollapalooza, August 1992

© Lisa Lake / Getty Images

SOUNDGARDEN

It may surprise you to learn that Soundgarden were the first grunge Seattleites to score a major record deal, signing to A&M in 1989. Guitarist and frontman Chris Cornell and 'colour guitar' player Kim Thayil (he prefers that to 'lead guitarist') were the only constants in their on/off 1984-2019 career. It wasn't until their third album, 1991's *Badmotorfinger*, that they really flew, though, with *Jesus Christ Pose* and *Rusty Cage* earning equal parts fame and notoriety. Although always in the shadows of Nirvana and Pearl Jam commercially, Soundgarden were perhaps the most ambitious band of the grunge era: Cornell's vocal range and Thayil's use of Asian-derived drones and Beatlesque psychedelic figures set them apart from any 'punk' roots or reducted Iommi-inspired doom riffing, as did their songs' rhythmic complexity and almost progressive rock-style interludes. Soundgarden hit their zenith on 1994's sprawling *Superunknown*, a 70-minute epic that's more redolent of mid-1970s Led Zeppelin grandiosity than any punk night in a Washington dive bar. With *Black Hole Sun*, *Spoonman*, *The Day I Tried To Live* and *Fell On Black Days*, this was PhD-level 'grunge'.

Cornell, who died in 2017, might have been the primary writer but it was Thayil's guitars that gave Soundgarden their instrumental identity. "I push the band to be heavy and dark – that's always been my role," he said in 2012. "The complex, cascading, complementary dark layers you can create are often heavier than the visceral approach. I think anything different or mysterious can be channelled into heavy – abnormality is a key."

ESSENTIAL LISTENING: *Badmotorfinger* (1991), *Superunknown* (1994), *Down On The Upside* (1996)
KEY GEAR: **CHRIS CORNELL:** Gibson ES-335s (including, now, the Tribute model), various Les Pauls. Gretsch Duo-Jets. **KIM THAYIL:** Guild S-100s, S-300s ("the neck is faster than the standard Gibson SG necks"). Gibson Firebird. Fender Telecaster. Hughes & Kettner Tube Rotosphere. Dunlop MXR wah, MXR MC-402 Distortion/Overdrive. EHX POG. Boss CS-9 chorus, DD-7 delay.

ALICE IN CHAINS

These guys were different again. While many of the grunge-era acts had a punk sensibility and were wholly dismissive of 1980s glam and hair metal, Alice In Chains actually grew from that scene. Guitarist Jerry Cantrell was previously in metal bands Diamond Lie and Gypsy Rose, and vocalist Layne Staley was serving his apprenticeship in Seattle glamsters Sleze and the occasional funk-metal band – you can almost hear the leather trousers.

AIC couldn't be accused of bandwagon-jumping though: their debut album, 1990's *Facelift*, was one of the first of the Seattle scene's real hits, becoming grunge's first gold record. Their metal tendencies served them well in terms of audience and airplay: they were virtuosic enough for metalheads, earning supporting slots for Van Halen, Megadeth and Slayer, and sludgy enough for the grunge kids. Either way, *Man In The Box* became an MTV staple. Their second album, 1992's *Dirt*, was the big-hitter – and anything but daft party-on-dudes metal. Six of the LP's 12 songs dealt with addiction, reflecting the whole band's troubles, though particularly Staley's long-running battle with heroin (he died in 2002). "We did a lot of soul-searching on this album," Cantrell said. "We deal with our daily demons through music. All of the poison that builds up during the day we cleanse when we play." The gloom didn't stop, with *Them Bones*, *Down In A Hole*, *Rooster*, *Angry Chair* and *Would?* all becoming hits. The band also arguably paved the way for a more nuanced grunge future, releasing the predominantly acoustic EPs *Sap* in 1992 and *Jar Of Flies* in 1994.

Cantrell rarely cited punk as an influence: he's claimed his biggest six-string heroes are Davey Johnstone of Elton John's band, Lindsey Buckingham and Billy Gibbons, and blues and country licks feature heavily on his solo albums. He says of Alice In Chains that they're "metal, blues, rock 'n' roll, maybe a touch of punk", adding that "the metal part will never leave and I never want it to". He tunes to E♭, though that's pretty common across genres. Although he's not a schooled musician, his choice of a G&L Rampage with Kahler vibrato was much more metal than your usual grunge player. In 2010, Slash hailed Cantrell as "one of the most inspiring" lead guitar players of the past 20 years.

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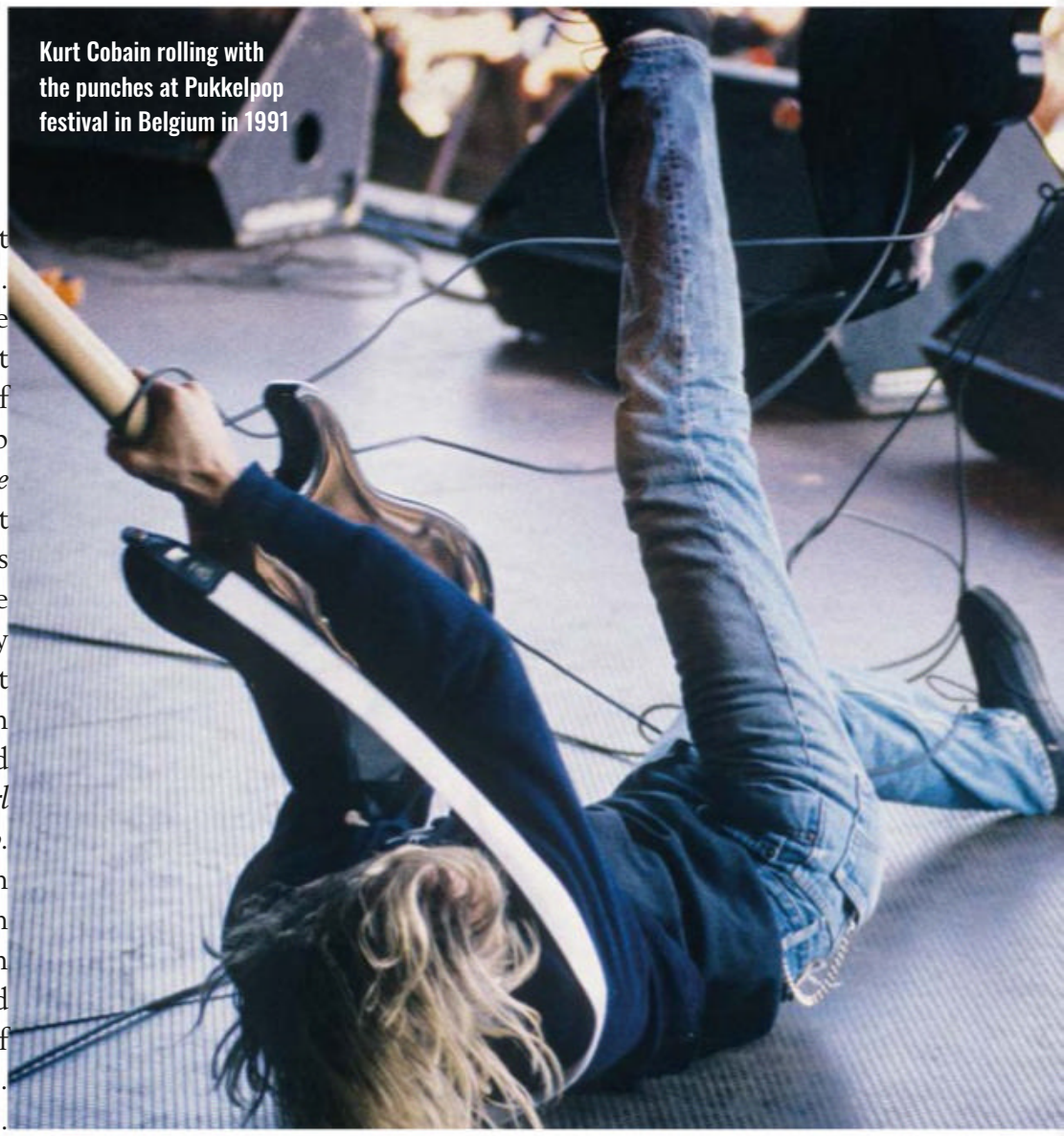
GRUNGE ROOTS & BRANCHES

You could spend weeks listening to bands who influenced grunge and the also-rans who never quite broke into the mainstream. The influence of 1980s alt-rockers Hüsker Dü and Pixies is well documented but it's worth remembering that all grunge players simply loved Led Zeppelin as well: it wasn't some ground zero. Tad and Melvins (in part thanks to Cobain's patronage) enjoyed five minutes of fame, and Mark Lanegan's Screaming Trees were another admirable Seattle-sound outfit. Before long, grunge had become shorthand for anything that wasn't metal but had a whiff of punk attitude about it. Babes In Toyland, Hole, L7, Stone Temple Pilots... the media (and listeners) like things in boxes. Evan Dando's Lemonheads were wittily dubbed 'Bubblegrunge'. Nothing wrong with that: *It's A Shame About Ray* and *Come On Feel The Lemonheads* were simply strong college/alt-rock LPs of the era. Later came some uninspired facsimiles: Puddle Of Mudd, Creed, Nickelback... and the term became meaningless when Def Leppard released their 'grunge' LP *Slang* in 1996.

ESSENTIAL LISTENING: *Dirt* (1992), *Jar Of Flies* (1994)
KEY GEAR: G&L Rampages with Kahler vibratos. Gibson Les Paul, SG. Dunlop Jerry Cantrell signature Cry Baby wah, MXR EVH117 flanger, Bass Octave Deluxe. Eventide TimeFactor. Boss CH-1, CE-3 chorus. Ibanez TS808 Tube Screamer.

Alice In Chains stars Layne Staley and Jerry Cantrell

NIRVANA


Kurt Cobain rolling with the punches at Pukkelpop festival in Belgium in 1991

Without question, Nirvana were the most influential of all the grunge-era bands. Part of that might be sad circumstance (they never had time to make a big mistake) but they did possess something special. Like many of their peers, their first break came via the Sub Pop label (with a 1988 cover of Shocking Blue's *Love Buzz*), which led to the $606 recording of debut album *Bleach* the following year. The album was patchy and the boys weren't exactly hailed as the world's most influential band-in-waiting. A recently discovered uncashed royalty cheque issued to Kurt Cobain in 1990 totalled a meagre $26.57 – even monthly, that's no living. But two songs pointed upwards: the Beatlesque slice of pop *About A Girl* and a three-minute punk blast named *Negative Creep*. David Geffen's DGC were impressed enough to sign them. The story of 1991's *Nevermind* is well-trodden ground: how Geffen weren't particularly happy with the band's choice of the relatively inexperienced Butch Vig as producer (see p30), hence the hiring of Slayer producer Andy Wallace to add a mix sheen. The budget was upped to a lofty $500,000.

"KURT NEVER HAD ANY INTEREST IN IMPROVING HIS GUITAR PLAYING IN A TECHNICAL SENSE. BUT WHEN IT WAS TIME FOR HIM TO DO SOMETHING, IT WAS *UNLIKE* ANYTHING THAT ANYONE HAD EVER DONE" DAVE GROHL

The resulting LP, originally to be called *Sheep*, was led by the *Smoke On The Water/More Than A Feeling* of its day in *Smells Like Teen Spirit*. Initially, everyone seemed happy. Kurt Cobain had indeed been aiming at a more accessible pop sound and it was only later, in 1993, that he complained. "Looking back on the production of *Nevermind*, I'm embarrassed by it now," he said. "It's closer to a Mötley Crüe record than it is a punk rock record."

The reaction was 1993's scabrous Steve Albini-produced *In Utero*, perhaps the finest representation of the band's oeuvre, even if DGC were horrified – and understandably so: it did half of *Nevermind*'s numbers. And that, posthumously released *Unplugged* album and live sets/outtakes aside, was it.

Cobain said that his plan for the fourth Nirvana studio LP was "pretty ethereal, acoustic, like REM's last album [*Automatic For The People*]". There were suggestions that it might even mean a solo career without the baggage of the G-word. Cobain knew very well about the vagaries of pop stardom and labels.

"Grunge is as potent a term as new wave," Cobain told *Rolling Stone* in January 1994. "You can't get out of it. It's going to be passé." He was wrong about that but he was wrong about many things. In the very same interview (three months before he took his own life), he insisted, "I've never been happier in my life."

Even after all this time, Cobain remains a somewhat controversial figure in guitar culture. In his final interview, with Fender's *Frontlines* magazine, he was asked what he felt when it was time to "cut loose" on the guitar. His blunt answer? "Less than you could possibly imagine." In the mid-1990s, as a new Foo Fighter Dave Grohl told *Guitar*: "Kurt never had any interest in improving his guitar playing in a technical sense. But when it was time for him to do something, it was unlike anything that anyone had ever done." Cobain did say he'd taken guitar lessons for a week when he was 14, learning AC/DC's *Back In Black*. But soon he was just writing his own songs. "Once you know the powerchord, you don't need to learn anything else." It's telling that two famous Cobain solos, those on *Teen Spirit* and *Come As You Are*, essentially ape the vocal melody.

Cobain's mastery – or otherwise – of the guitar is irrelevant. Nirvana's influence was much deeper and wider than technicality. They effectively made alt-rock a saleable commodity and angst a currency. Cobain, through his sheer popularity, made cheap student guitars desirable. His naivety was a beacon to any guitarist struggling to play 'properly,' yet few could rival his melodic sensibilities. Before *Nevermind*, grunge was regional rock music. Afterwards, it was a global phenomenon. By the end of their brief stardom, there probably wasn't a single guitar player who didn't have a strong opinion on Nirvana. And *that* is influence.

© Gie Knaeps / Getty Images

ESSENTIAL LISTENING: *Nevermind* (1991), *In Utero* (1993), *MTV Unplugged In New York* (1995)

KEY GEAR: Various Fender Mustangs, 1965 Jaguar with DiMarzio pickups. Japanese Fender Strats with bridge humbuckers. Univox Hi-Fliers. Boss DS-1 and DS-2 distortion. EHX Small Clone, Stereo Polychorus, Echoflanger and Big Muff. ProCo RAT.

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GEAR-UP FOR GRUNGE

The grunge scene saw fringe guitars and pedals of the past rediscovered – and they've remained on shelves since. Beware: the 'bespoke' Dod FX69 Grunge pedal of the mid-1990s is considered something of a dud by many but there are numerous current guitars that came back to the fore via grunge's thrift-store ethos, and the ongoing boom in fuzz effects arguably goes back to grunge as well. Here are some strong choices for 2021. No locking trems in sight.

FENDER PLAYER MUSTANG AND DUO-SONIC both £559

SQUIER CLASSIC VIBE 60S JAZZMASTER £399

FENDER PLAYER JAGUAR £659

HAGSTROM PAT SMEAR SIGNATURE £675

GUILD S-100 £629

MXR M103 BLUE BOX OCTAVE FUZZ £86

ELECTRO-HARMONIX GREEN RUSSIAN BIG MUFF PI £75

ELECTRO-HARMONIX NANO CLONE CHORUS £46

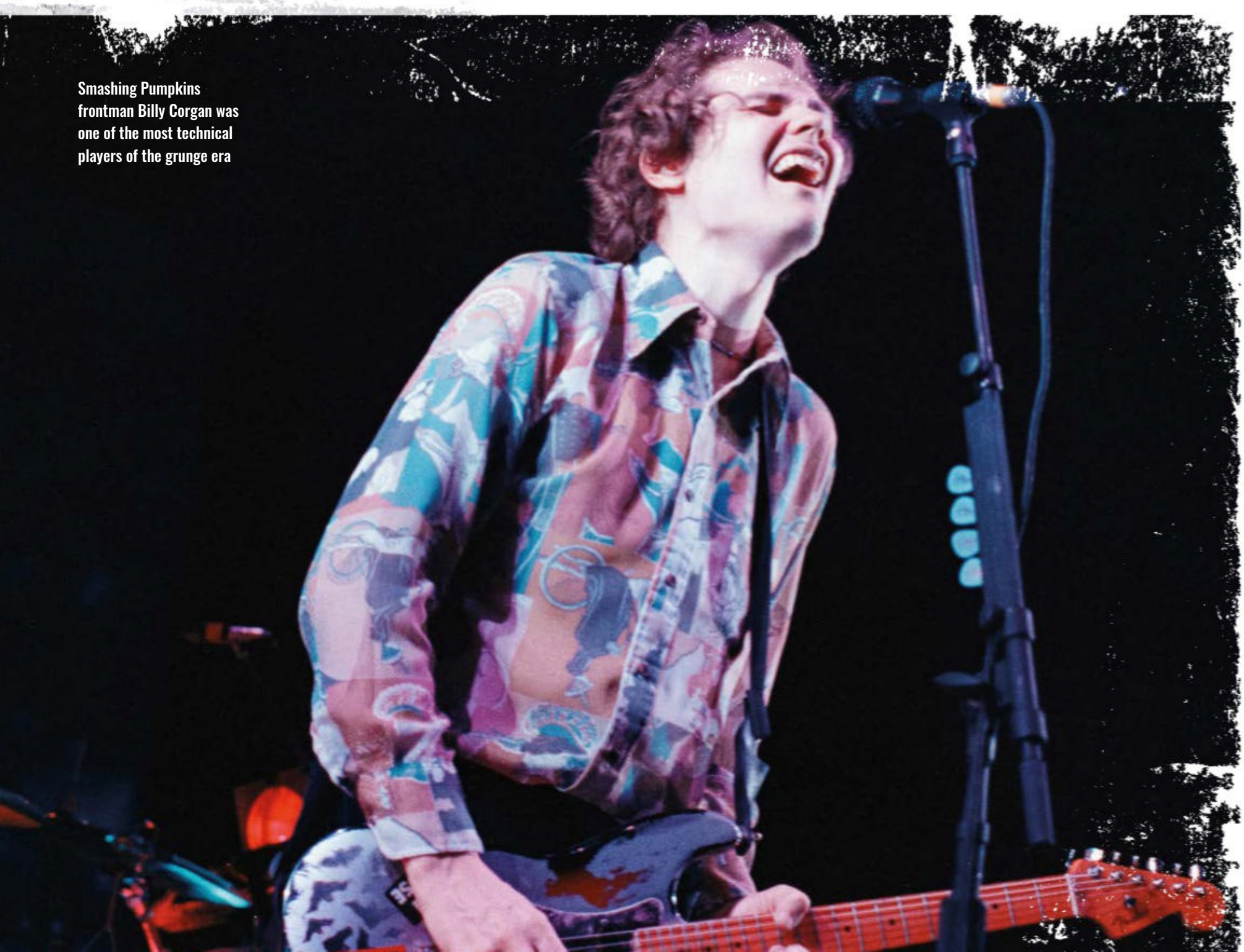
SMASHING PUMPKINS

Like Pearl Jam and Soundgarden, Smashing Pumpkins only really sounded grunge during the era's first flush. *Gish* arrived in 1991 before *Nevermind* and was similarly produced by Butch Vig, its fear and self-loathing bolstered by a blitzkrieg of guitar riffing. But by 1993's *Siamese Dream*, it was clear the Pumpkins had loftier theatrical ambitions. Billy Corgan could orchestrate guitars like Brian May and pummel riffs like Jimmy Page. He was also very much in charge: the band's guitarist James Iha and bassist D'Arcy Wretzky barely played on *Siamese Dream* – it was all Corgan.

From here, it was a short hop to the full-on grandiosity of 1996's double LP *Mellon Collie And The Infinite Sadness*, which is about as punk rock as *Physical Graffiti*. Corgan was an opposite to Kurt Cobain in many ways, unconcerned with pop accessibility and very much taking pride in his technical prowess. "We can mow any band down right now," he told *Guitar* upon *Mellon Collie*'s release. The band's predominantly synth-led latest album *Cyr* evinces how Corgan was always looking towards New Order and The Cure as much as Black Sabbath. But *what* a guitar sound early on: Corgan credits much of it to his KT88-modded 'Soul Head' Marshall JCM800 2203. Butch Vig reveals more on p30.

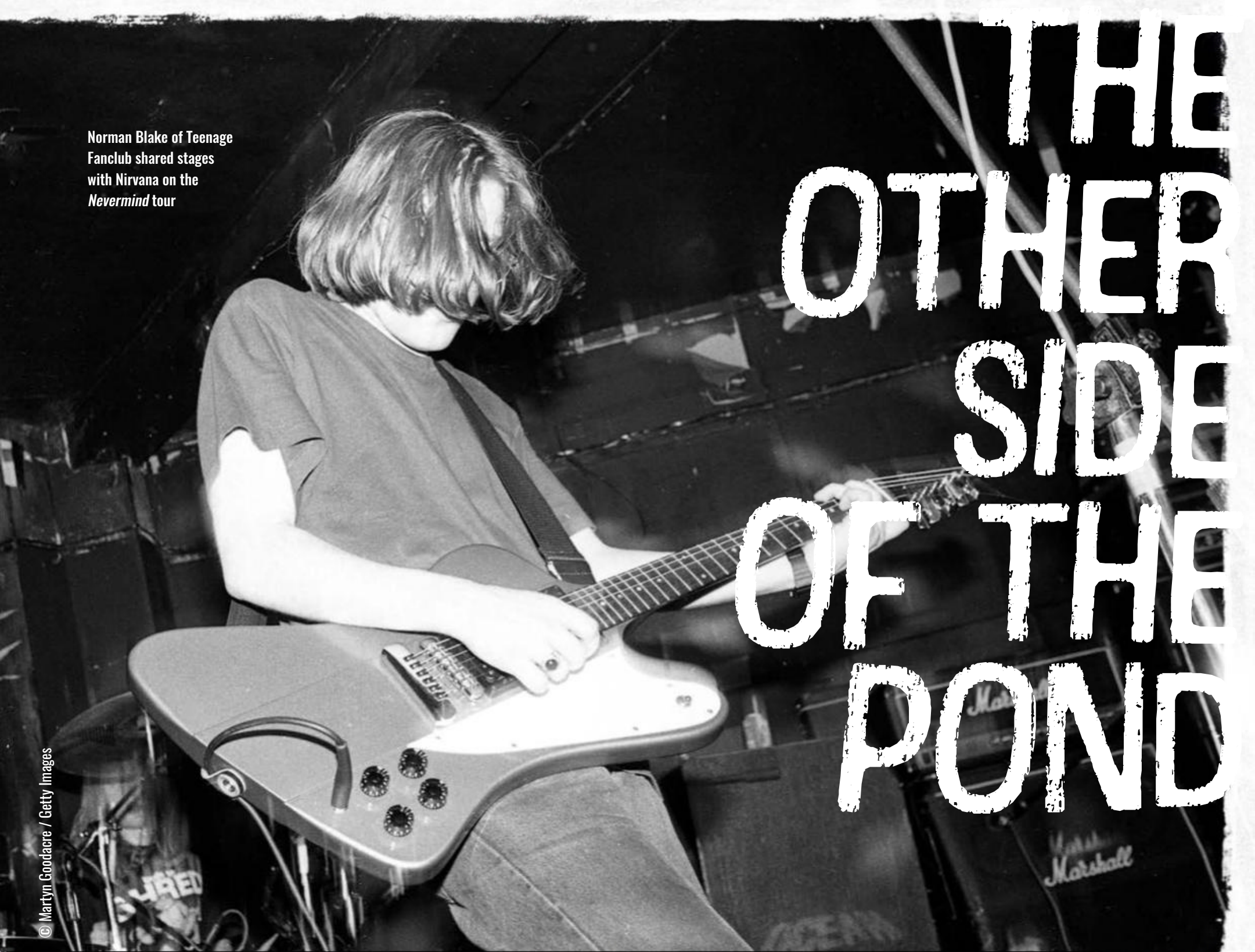
ESSENTIAL LISTENING: *Gish* (1991), *Siamese Dream* (1993), *Mellon Collie And The Infinite Sadness* (1996)

KEY GEAR: BILLY CORGAN: Various Strats, Gibson ES-335s. Recent Reverend electric and Yamaha acoustic signature models (the outspoken Corgan says he'll never work with Fender again or Gibson because they "disrespected" him). EHX Big Muff, Bad Stone. Fender Blender. Maestro PS-1A. MXR Phase 90 and Phase 100. Mu-Tron Bi-Phase.



Smashing Pumpkins frontman Billy Corgan was one of the most technical players of the grunge era

© Jim Steinfeldt / Michael Ochs Archives / Getty Images



Norman Blake of Teenage Fanclub shared stages with Nirvana on the *Nevermind* tour

© Martyn Goodacre / Getty Images

THE OTHER SIDE OF THE POND

WHILE GRUNGE WAS PRIMARILY AN AMERICAN GENRE, ITS IMPACT WAS GLOBAL. RAYMOND MCGINLEY AND NORMAN BLAKE OF SCOTTISH ALT-ROCKERS TEENAGE FANCLUB FIRST MET NIRVANA ON THEIR *BLEACH* TOUR IN EDINBURGH AND WOULD GO ON TO SUPPORT THE BAND ON THE EUROPEAN LEG OF THE *NEVERMIND* TOUR

"It goes without saying hat they were a great live band," says McGinley, "and it also goes without saying that Kurt was having a few issues at the time. Although he was a really nice guy, he was a bit more remote from us than the others. He was in a bit of a bubble with him and Courtney. He was really friendly. The whole band were really friendly. And the funny thing is the crew were all Scottish. Big John Duncan, the guitar tech who we still know, and the tour manager Alex – they had this whole gang of Scottish people.

"We did the whole European tour with them. It was great and it felt like a phenomenon. It was the first time we went to Norway, Spain and Sweden, and we talk to people today and they still remember those shows. Nirvana were really supportive of us. We were part of the event and everyone was nice to us. Sometimes you do support tours and the crowd look at you as if they just want you to go away.

"People weren't there to see us but we felt at home at those shows. To see Nirvana from the side of the stage was amazing. They were really warm, friendly people to us. I remember certain things like Big John breaking into a karaoke machine in a hotel in Helsinki, and weird memories like a day off in Stockholm hanging out with Krist and Dave, and going to the rock garden because they wanted to see the ABBA memorabilia – and the shows were pretty good as well!"

"It was an incredible experience," says Blake. "We knew them a bit before *Nevermind* so they invited us to do the tour with them. I've got fond memories of that time. They were lovely people. Kurt was a lovely guy. Dave Grohl's still a lovely guy. It's incredible what he's done from being the drummer in Nirvana to then start another band and be so successful himself is really impressive. The public persona you see of Dave Grohl, that's what he's like in private.

"Watching them live, it was really exciting – a big sound. They were loud and they just exploded during that tour. You were getting to witness a phenomenon and that doesn't happen too often. And we got to do it again a few years later when we toured the US with Radiohead on *OK Computer*, another phenomenon – this album just exploding. The reaction of the audience to this group of musicians was just incredible. It's not something that happens very often and we got to see it twice."

"Kurt's guitar playing was an expression of himself in the best way, as opposed to being mannered," adds McGinley. "It was like he played as him rather than playing as him trying to think of what to do. He had a certain way of playing rhythm guitar but the thing they had, like the Pixies, was that sometimes you play and sometimes you don't play. When you play quietly, then loud, it has an impact, and Nirvana did that in the same way as the Pixies. When you play something scratchy and then kick in a pedal and it sounds massive, the scratchy bit sounds kind of weak but it has to sound weak in order for the other bit to sound so powerful. Sometimes, having something scratchy works really well because it leaves space for what comes after it."

Check out the full interview with Teenage Fanclub next month

CHAIRMAN OF THE BOARD

Butch Vig's supergroup 5 Billion In Diamonds recently released their second album, *Divine Accidents*. We caught up with the superstar producer – who was behind the desk on *Nevermind, Siamese Dream* and a host of other classics – to find out how some of the most iconic guitar tones of all time were created

WORDS PAUL ROBSON

Butch Vig might be a drummer but, as the man who has captured the guitar magic of Kurt Cobain, Billy Corgan, Thurston Moore, Billie Joe Armstrong, Dave Grohl and many more players, he is perfectly placed to talk about how to get your own best performances on tape – and it all begins by asking yourself some overarching questions.

"The first thing I need to work out when recording guitar," says Vig, "is what sort of tone we need: should it be a clean tone or thicker? Is it going to have effects on it? Is it a rhythm part, a lead part or a melodic part? Understanding that will help to dictate how the amp should sound and what guitar you should use. Then you have to figure out how the guitarist plays: are they a thrasher or a finesse player? Are they punk-rock rudimentary? That can also dictate the kind of setup you want."

A GOOD START

The potential destinations from that starting point are infinite. But you have to start somewhere and, for Vig, that jumping-off point comes with the familiarity of a long-time favourite amp.

"What you use will depend on the song but for, example, on the 5BID record, there are a lot of songs that have strummy acoustics blended in with electric guitar and, typically, if I'm going for something like that – a bed with rhythm – I'll lean towards classic amps that I've used before, such as Vox AC30s, which are some of the best for strummy electric guitars. Then if I want to dirty it up, I'll use pedals to get some overdrive."

© Chris Pizzello / AP / Shutterstock

GOING DIGITAL

Not everyone has access to physical equipment but this is where Vig recommends turning to your laptop.

"I have a lot of guitar simulator plugins and they work pretty well. Sometimes I'll record two tracks with a guitar – one going into the amp with a mic and one with a DI straight into Pro Tools. Then if I want, I can run that DI into one of several amp sims – a lot of those sound really good – and then I can blend those together if I want. You can emphasise the clean part but then if you have a part that you want to thicken up, you can blend in the fuzz from Pro Tools for the chorus or whatever. It gives me more options."

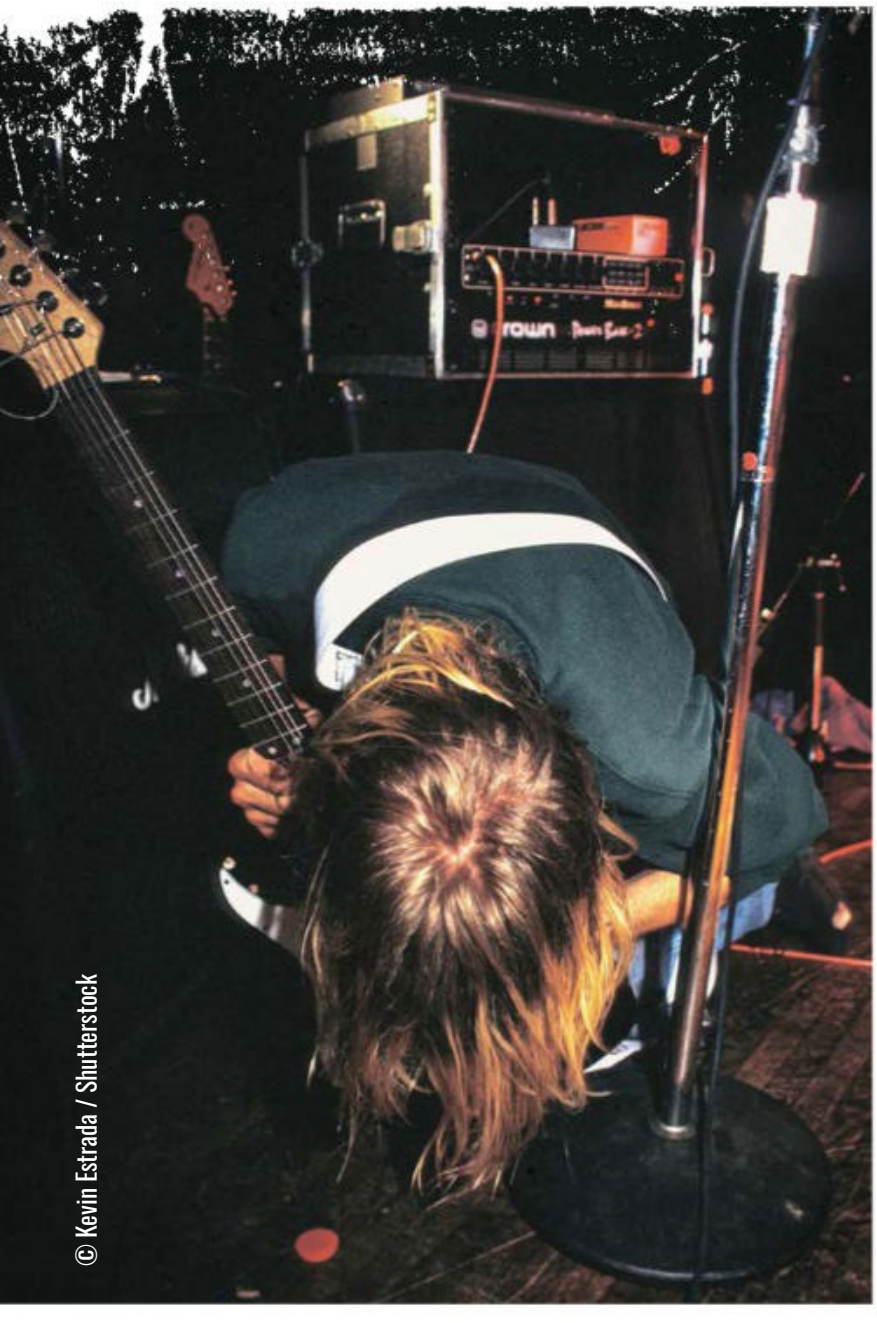
IN THE MIX

Mixing guitars is a Vig speciality. He famously used enormous numbers of guitar parts on some of those hit 1990s albums. Tracking multiple parts in the mix is still something he recommends.

"I do like to double-track guitars, especially clean ones, because I like to get them very tight and then pan them left and right for a widescreen sound that leaves the middle open for vocals and other lead instruments. It's the same with recording acoustic: whenever I do that, I always double it. If there isn't a double, then sometimes I'll pan it left, then run it through a delay set at just 20 or 30 milliseconds, so it separates it just enough that it feels like a left/right. But, again, it puts the guitar out in the corners so it leaves room up the middle for the vocals and snare drum or piano riff or whatever."

Not that Vig stops at merely *double*-tracking. The super-producer took things to real extremes when he worked with Billy Corgan on the Smashing Pumpkins' second album.

"*Siamese Dream* is probably the album I recorded the most guitars on. I mean, a song like *Hummer*, at some point, probably had 50 or 60 guitar parts on it.



“I LIKE TO DOUBLE-TRACK GUITARS FOR A WIDESCREEN SOUND THAT LEAVES THE MIDDLE OPEN FOR VOCALS AND LEAD INSTRUMENTS”

We had to be focused when we were layering those, to make sure that each sound fit in with the other layers. You can’t just start piling one on top of the other, 10 guitar tracks with the same tone – it’s just going to sound like mud. So we got really good at figuring out how to find frequencies in a particular guitar track and blend those with other frequencies. It was time-consuming but I think the record sounds really good as a result because it does sound really big but very focused. You can really hear the tones.

“Billy Corgan is a pretty badass guitar player,” adds Vig. “He’s really, really talented, and he also always had a really good understanding, sonically, of what he was going for.”

Even so, both Corgan and Vig kept themselves open to new ideas and, when one presented itself by accident, they seized upon it.

“The engineer at the studio, Mark Richardson, had a weird lap steel guitar that had this little button you could flick, and it was a distortion unit. I asked him if he could take it out, so he took the thing apart and took out this tiny little box and we started using that for some of the overdrive. Billy still has it. And it just had this most insane buzz – it would just kind of stir your brain right up. But it had a really narrow focus too and we used that on a lot of the lead solo parts on *Siamese Dream*, because they just had a real specific frequency. And it was just something that happened to be at the studio. We discovered it and ended up using it.

“Coincidences and mistakes are amazing, you know? The title of the latest 5 Billion In Diamonds record, *Divine Accidents*, came about from [bandmate] James [Grillo] and I watching a documentary on Orson Welles. About two thirds of the way through, he said the best things about making films were the divine accidents and we looked at each other: ‘Okay, that sounds like a good album title.’”

LAB RAT

Those happy accidents can be encouraged along by a sense of experimentation and Vig is keen to stress that everyone should try the unknown when recording music. If you have an idea then it might work or it might not. But you should never leave the studio not knowing.

“That’s the great thing about being a recording studio,” he says. “There are so many different options now for musicians. Whether it’s in a digital system like Pro Tools or Logic or whatever, or just analogue pedals with amplifiers and microphones, you have this giant palette to paint with. I always encourage people to spend time doing that.

“You know, it’s cool if you just want to get something done quick and you have a specific sound in mind but I love lab rat days. With Garbage, we would have days where Shirley would just say, ‘I’m not coming into the studio so you guys can go ahead and nerd out all day long and just record crazy guitar stuff’. Some days we’d record all day and not use anything but it’s fun. And sometimes you find one little thing and that becomes a hook or a loop somewhere and then that ends up being in song, and I love doing those kinds of things. I always encourage young artists to do that – to take some chances and to really experiment.”

OPPOSITE Krist Novoselic, Dave Grohl and Butch Vig reunited in LA for the 20th anniversary of *Nevermind* in 2011

ABOVE LEFT When recording Kurt Cobain’s guitar parts for *Nevermind*, Vig used a rented Vox AC30 and Fender Bassman, as well as going direct for some of the more aggressive tones

ABOVE RIGHT 5 Billion In Diamonds, from left to right, top to bottom: Ebbot Lundberg, David Schelzel, Helen White, Butch Vig, James Grillo, Andy Jenks

© Mick Hutson / Redferns / Getty Images

ABOVE Vig's band Garbage formed in 1993 and the line-up also includes (L-R) Steve Marker, Duke Erikson and Shirley Manson

It was that sense of experimentation that led Vig to exclude amps altogether at certain points during the recording of Nirvana's era-defining *Nevermind*.

"I remembered reading about one of The Beatles' songs, I think it was *Helter Skelter* or something, where John Lennon said that he just plugged direct into a preamp – there was no actual amp – and they just turned the gain up and got this crazy scratchy sound. And so and I used to do that at Smart [Vig's famed studio] too, and I suggested that on a couple of the Nirvana songs [*Breed* and *Territorial Pissings*]."

The rest of Nirvana's iconic 1991 album was recorded relatively basically as well, with only a handful of amps and pedals.

"I think when we did *Nevermind*, Kurt had a Mesa/Boogie and I rented a Vox AC30 because, as I said, I love the clear tones on those. I also rented a Fender Bassman. We had one at Smart Studios that we used all the time. One of the engineers called Doug Wilson had modified it. I don't know what he did but it was the fattest, crunchiest, thickest guitar tone. So I rented one in LA when we did *Nevermind* and, although it didn't sound quite the same, we used that on *Lithium* and on some of the really heavy tones as the main guitar amp.

"And we only used a couple of pedals. Kurt had a Big Muff and I think I had a Russian Big Muff, which is, you know, very close. And Kurt had a RAT, and then he had a Small Clone, which is sort of the watery effect on *Smells Like Teen Spirit* in the verses. *Come As You Are* as well. But that was it – a pretty simple setup really."

RECORDING TO TAPE

Vig went back to basics when he reunited with Nirvana's Dave Grohl on Foo Fighters' 2010 album *Wasting Light*.

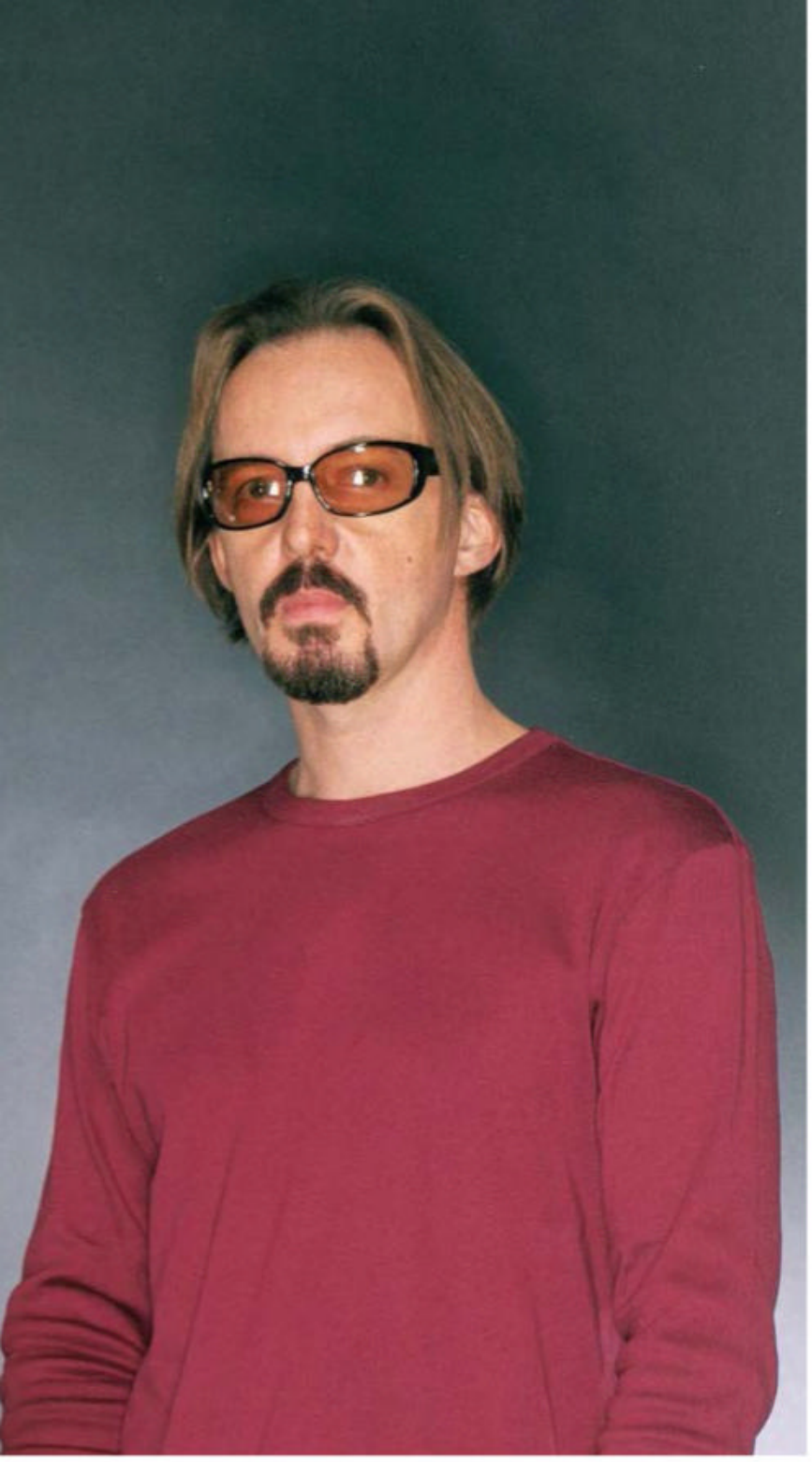
"When Dave approached me, the first thing he said was that he wanted to record it in his garage. I was like, 'That's cool'. And when I drove out to his house and looked at the garage, he set up a kit and he started playing and I was looking around, listening, going, 'It's small but the live sound is pretty tight and punchy – we can make this work'. Then he said that he wanted to do it on tape and I'm thinking, 'Oh shit, I don't want to go back and record on analogue tape', even if I was really good at it.

"The thing is – and I told this to the band – it's all about the performance on tape. I can edit it but I can't pitch-correct something. If the timing's off, I can't shift it. And I kept telling the band this. 'You guys have to play your asses off because what you record will be what's on tape.' And they all rose to the occasion. I think because of that *Wasting Light* is the truest representation on record of what the Foo Fighters sound like live, you know?"

MANIPULATING SOUND

Vig is clearly someone who these days makes the most of the digital options available to him. But even when recording analogue, he insists there is a lot you can do to manipulate sound. Things just take more time to get right.

"If you're using an amp, there's so many things that come into that," he says. "You could put a Shure 57 in



front of it, you can put a large-diaphragm mic in front of it, you can move the mic back… if an amp is quite bright, I use ribbon mics because they have a softer top end, and sometimes they will focus the midrange in a really nice way.

"Sometimes I multi-mic a cabinet but you have to be really careful with the phasing. If you point three or four mics at a cab, you might get some notches in the midrange or the bass where things get overextended or they get cut out. You have to be really careful when you're setting them up to make sure that the phasing is good.

"But if the phasing is good, it can be a helpful technique, so you can put a 57 or bright condenser on an amp and then put a large-diaphragm mic like a U87 or ribbon mic on it, which is a totally different colour, and then you can blend.

"But no rules. It's fun to record guitars because there's no such thing as an exact way to do it. Each musician or engineer should experiment and find what they think sounds cool."

GOLDEN RULE

Before we let Butch go, we want to know if there's one thing he recommends that anyone recording music, and guitars in particular, should always try to do.

"Well, that's tough question," he says. "First of all, it helps if you have a great guitar that you like to play. Obviously every guitar is different but you want something that, in theory, is intonated pretty well and in tune. Although if you're a band like Sonic Youth [Vig recorded their 1992 album *Dirty* and its 1993 follow-up *Experimental Jet Set, Trash And No Star*], you throw that out the window because their whole sound is this based on the kind of dissonance that their guitars create from all the unusual tunings.

"But I think the most important thing is to remember how a guitar is going to sit in a song, you know? Is it there as a support? Is it the main riff? Is it going to drive the song? Is it supposed to fit under things? Try to try to understand how that will work. This is coming from me as a producer rather than a guitarist, you know, because a lot of musicians work on their own part and they don't always listen that closely to the big picture of what a song should sound like. So it's important to understand how the guitar should sit in the mix and what it's supposed to do. That's the big thing when you're producing." G

5 Billion In Diamonds' second album *Divine Accidents* is out now on MAKE Records

© PetaPix / Alamy Stock Photo

THE *Guitar* INTERVIEW

ANNA CALVI

WORDS GARY WALKER

It's been almost 10 years since the world first encountered Anna Calvi's remarkable blend of widescreen reverb-washed guitar and operatic vocals on her eponymous debut album. Since then, she has established herself as one of the most unique and respected artists on the global stage, with two more critically celebrated albums to her name. At the heart of all the acclaim? A woman and her Telecaster

"If Batman played guitar, it would be that guitar." Anna Calvi is giving her opinion on her new instrument, a Fender American Professional II Telecaster that sports the company's polarising Dark Night finish – and you have to say she has a point. It's a colour of which the caped crusader would surely approve but one equally suited to Calvi, whose music regularly attracts many of the same adjectives – dark, brooding, melancholic – as Gotham's own Dark Knight.

When it comes to Telecasters, Calvi's opinion is worth paying attention to. The 40-year-old London-born virtuoso has been in love with the Fender's many alluring utilitarian charms since she was 17, when she first saw Jeff Buckley playing one on television. "I didn't know anything about the instrument but I just thought it was the coolest thing ever," she explains of that initial attraction. Since then, Telecasters have accompanied Calvi on every step of her astonishing musical journey.

After playing in a series of bands before going solo and touring with Interpol, Arctic Monkeys and Nick Cave's Grinderman, Calvi's first big moment came in 2010 with her cover of the Wayne Shanklin song *Jezebel*, made famous by Édith Piaf. From the simmering spaghetti-western atmospherics of her self-titled 2011 debut album via the more expansive instrumental textures of *One Breath* three years later to 2018's defining statement *Hunter* (as well as its collaborative sibling *Hunted*), Calvi's playing has been jaw-dropping. Fusing classical and Spanish influences with sizzling lead work, and co-existing with a towering operatic vocal style, it's seen her perform hundreds of gigs across the globe, conquer the festival circuit several times over and earn three Mercury Prize nominations. Remarkably, one single guitar, a sunburst 1997 American Standard Tele, has matched her stride for stride.

ON THE SLAB

"I loved Jeff Buckley's guitar tone," Calvi says of how she came to own her number-one instrument. "So I got my first Tele and it's the same one I've had since then. It's the guitar I use on tour, the guitar I record all my albums on… It's been a long love affair I've had with the Telecaster.

"I think guitars really change the way you play. The Telecaster has a great chime. It sounds great for rhythm playing. It sounds great when you use overdrive. It can be lots of different things. It was after I bought that Tele that I decided I wanted to do music with my life, because before then I thought I was going to do art. Getting that guitar changed everything and made we want to pursue music as a life choice."

Despite having a pivotal effect on Calvi's life and becoming priceless in the process, the '97 Tele continues to be put through the demands of touring.

© Tabatha Fireman / Fender

While its owner has two other American Standards gifted to her by Fender, as well as a Gretsch Jet Baritone, it's the Tele that continues to take the majority of the punishment.

"It tours around the world with me and I've become progressively more aggressive towards it," says Calvi, the anxiety evident in her voice. "On stage touring my last album, I was a bit wilder. I had a moment in one of my shows when the neck started to come off the body. I have to say, it absolutely terrified me.

"Because Teles are so sturdy, you feel as if nothing can break them. I was shocked that my guitar could break if I was too aggressive with it. I think it had just had too many whacks, being thrown around for a whole year's touring until it said 'enough'. It made me realise even more how attached I am, and that if it couldn't be fixed I'd be heartbroken. I don't know if I'd ever get over it. I'm kinder to it now, if I want to throw a guitar around, I'll choose a different one."

BAT SIGNAL

Perhaps, then, it's time for the new Batman guitar to enter Calvi's live arsenal? She spent the days prior to our interview getting to know this dark and stormy addition to Fender's American Professional II range,

> “I USED TO THINK EVERYTHING SHOULD COME FROM THE HANDS BUT I’VE BECOME MORE OPEN TO HAVING PEDALS. IT’S AN INTERESTING WAY OF SCULPTING YOUR SONIC UNIVERSE”

Calvi headlining the Fender Next stage at Brighton’s Great Escape Festival in 2019

which offers an enormous slew of tweaks to Leo’s classic recipe and is designed to give professional musicians an extra edge – from rolled fingerboard edges to advanced switching, sculpted neck heels and, at the forefront of Calvi’s mind, new V-Mod II single-coil pickups. “They sound really great,” she says. “They really sing out and they’re great when you overdrive them”.

While her old faithful might hold a special place in her heart, Fender’s YouTube video of Calvi playing debut album track *Rider To The Sea* demonstrates that she’s already comfortable with her new squeeze. Witness the dulcet punch of the low notes and the scorching Hendrix-like string bends, vast raked chords and controlled brutality with which she tears down the smooth rosewood fretboard with a brass slide and coaxes a cranked Deluxe Reverb into feedback. It’s spine-tingling.

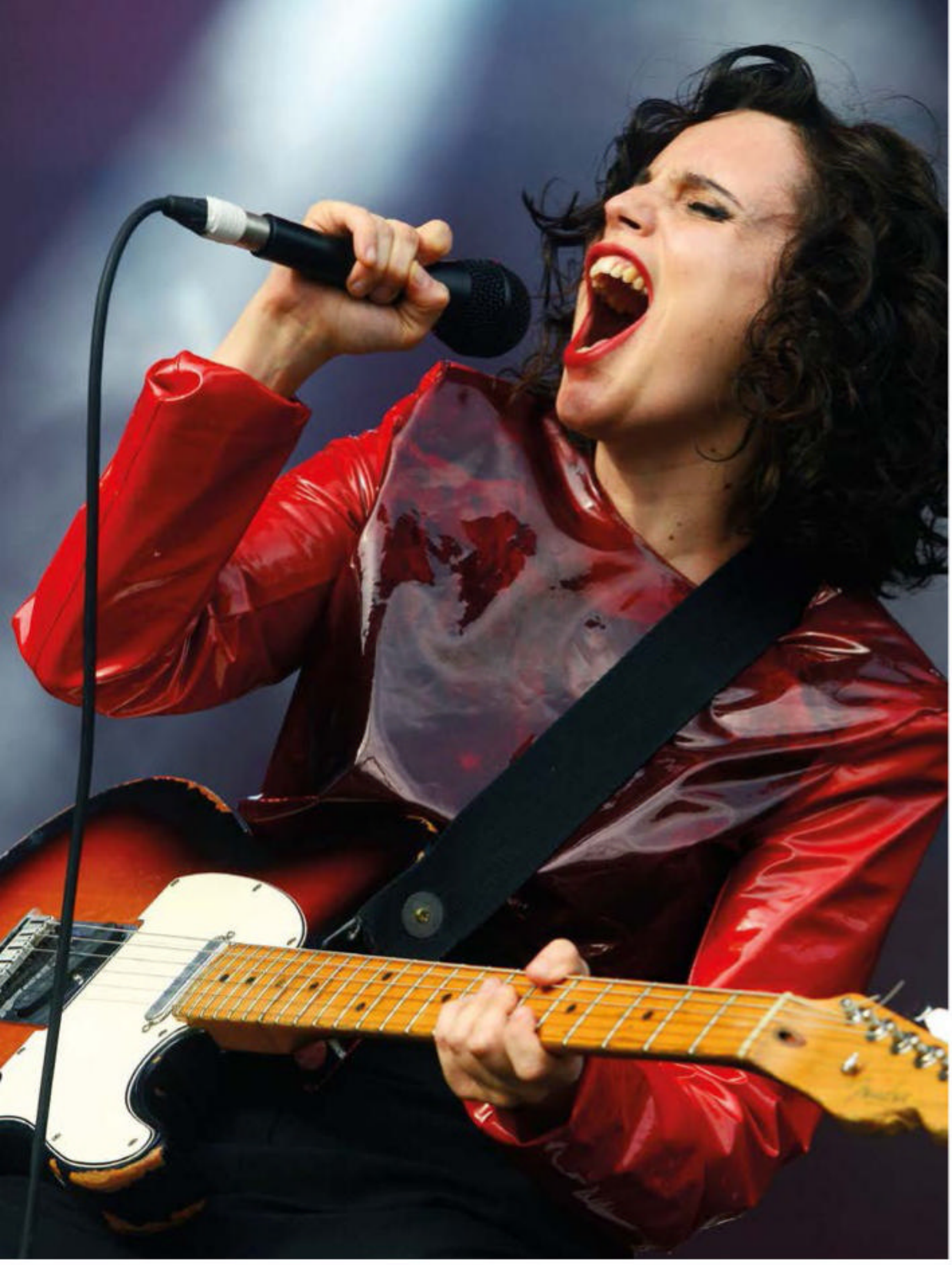
“I love the versatility of a Tele,” says Calvi. “The American Pro II sounds great. It has got a slightly more bassy option, a rounder tone than my American Standard. If ever there was a criticism of Telecasters, it’s maybe that they don’t quite have those low-end tones. But this new American Pro II series takes care of that. It sounds really full and rich.”

The broader tonal signature of the new guitar may make it a good match for Calvi’s primary amp too, the 1966 Vox AC30 she’s been playing for most of her live career.

“I think, especially when you’re recording, everything sounds a bit duller than when you’re standing right in front of the amp,” she says. “Using the Tele and the Vox is a good way to recreate that bite you want from a recording. I’m just amazed at how durable the AC30 is. There was one gig where I turned around and there was smoke coming out of it. That was a bit concerning. But other than that, it’s followed me around the world and done a great job.”

ORCHESTRAL MANOEUVRES

Calvi’s superlative technique is partly the product of a love of classical music inherited from her parents, as well as an early grounding in the violin, which she first picked up at the age of six. She believes studying the complexities of that fretless instrument helped inform her extraordinary six-string feel.



Calvi and her beloved 1997 Telecaster at London's All Points East Festival in 2019

"With the violin, everything is about how you produce a note," she says. "You can produce a note in so many different ways, and there are so many things that can affect the value and emotion: how much vibrato you put on it, how fast you move the bow, how soft or hard. Sometimes with a guitar, it's easy not to think about that – the phrasing or how hard or soft you play – and I think it's definitely affected me as a guitar player that I really try to think about being expressive in my vibrato, phrasing and dynamics."

Calvi has evolved an unusual sweep picking style too, which stems from her interest in West African music. "It actually came out of the fact that my weakness is my right hand in terms of up and down picking," she says, offering hope for we mere mortals. "I was never really that good at it. I had this realisation that, instead of finding that frustrating, I would try to make it my strength, try to be as economical as I can and try to use sweep picking as much as I can, and that developed into a way of strumming which is a kind of circular motion to create the appearance of lots of notes being played at the same time."

Following her graduation from the University of Southampton with a degree in music, it took Calvi a while to overcome her phobia of singing. When she did find that huge breathtaking voice, it intertwined harmoniously with her outrageous guitar chops, which immediately drew comparisons to her hero Buckley. She emphasises, though, that virtuosity is nothing without humanity and emotion.

"It has to come from the right reasons, which is you're exploring a story and an emotion and therefore it's what the story and the song calls for," she says. "I don't want to overdo it. It's something all guitarists learn as they get better: less is more. The simpler you can be but express the same emotion, the better it will be. There's something really profound about saying something in the simplest terms but being the most emotional about it.

"I think there's a sense for me of the guitar takes over where the voice stops. They're almost one thing and both serve the same purpose, which is to explore the story of the song."

ON THE HUNT

While that philosophy initially manifested in a purist's approach to the guitar informed by Calvi's classical education, by the time she unleashed the electrifying sonic and visual melodrama of 2018 album *Hunter*, it had given way to a boundlessly expressive outpouring.

"I think it's got a bit wilder and freer," she says. "With my first album, I almost wanted to treat the guitar as a classical instrument, more like classical or Spanish guitar. But now there are more moments where I turn up the drive. I use slide a lot more too. The thing I like about slide is that it's quite similar to the human voice, in the same way you can bend a string. It's like an extreme bend going between notes and I find that really thrilling."

That sonic evolution has also seen Calvi embrace effects, and any guitar she uses has to play nicely with a pedalboard that has grown to fairly sizeable proportions to include a T-Rex Room-Mate reverb, a Crowther Hot Cake, and an Electro-Harmonix Big Muff, as well as delay, chorus and octave options.

"I'm definitely more into experimenting with pedals than I used to be," she confirms. "I used to think that everything should come from the hands but now I've become a bit more open to having lots of pedals. It's a lot of fun and an interesting way of sculpting your sonic universe."

During these seemingly endless COVID-19 lockdowns, Calvi has been busy doing just that: sculpting new sonic universes. As well as test-driving the American Professional II, she reveals that she's been writing her fifth album. While remaining guarded about the details, she's happy to report that once again everything has been written on her beloved 1997 American Standard.

"I don't know if I want to say yet – it's early days," she says when asked what direction the songs are taking. "I'm enjoying the exploration stage at the moment. I definitely have enough songs for an album. I'm just trying to decide whether they're good enough. That's the next stage." G

For more on Anna Calvi, go to annacalvi.com. Find out more about the American Professional II range at fender.com

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METAL MACHINE MUSIC

METAL

From National and Travis Bean to James Trussart and beyond, the bodies and necks of guitars have been made out of metal for almost a century. Steel yourself as we uncover the nuts and bolts of their shared history

WORDS TONY BACON
PHOTOGRAPHY ELEANOR JANE

Let's get something out of the way first. If you're expecting wise words about the kind of metal associated with big hair and extreme shredding, leave now while there's time. In this feature at least, we're all about metal as a guitar-building material alone.

Most guitars are largely made out of wood. This you know. Usually, the only metal you'll see is used to make the frets, the pickups and some of the hardware, such as the bridge, the tuners and the strap buttons. And perhaps a few plates, and maybe the knobs. And there's the strings, of course. Best not to forget about them.

Throughout the long history of our instrument, however, some brave souls have gone further. In some cases, much further. Our story starts in California in the 1920s, where John Dopyera set up the National company in Los Angeles in the middle of the decade with several of his brothers. It's likely that he and George Beauchamp collaborated to design the resonator guitar, National's contribution to the search for more volume.

George was a Texan vaudeville guitarist and a keen tinkerer, by now living in LA and working for National. Like many performers of the time, he was fascinated by the potential for making conventional flat-top and archtop guitars louder. Many guitarists playing in bands of all sizes were longing for more volume than existing instruments could offer.

MODEL G—This instrument is a favorite with the professional players and non-professionals who desire an electric guitar that is distinctive and assures dependable performance. The professional styling of the Model G is enhanced by the polished gold chrome finish and gold-plated tailpiece and headcover plate.

Every one of the traditionally fine qualities of Rickenbacker instruments are to be found in this model. The control knobs and gold-backed fretboard are of clear lucite, and the fret and finger positions are white-filled and inversely carved to complete the pleasing design of the instrument. The instrument body is beautifully contoured and its construction is flawless.

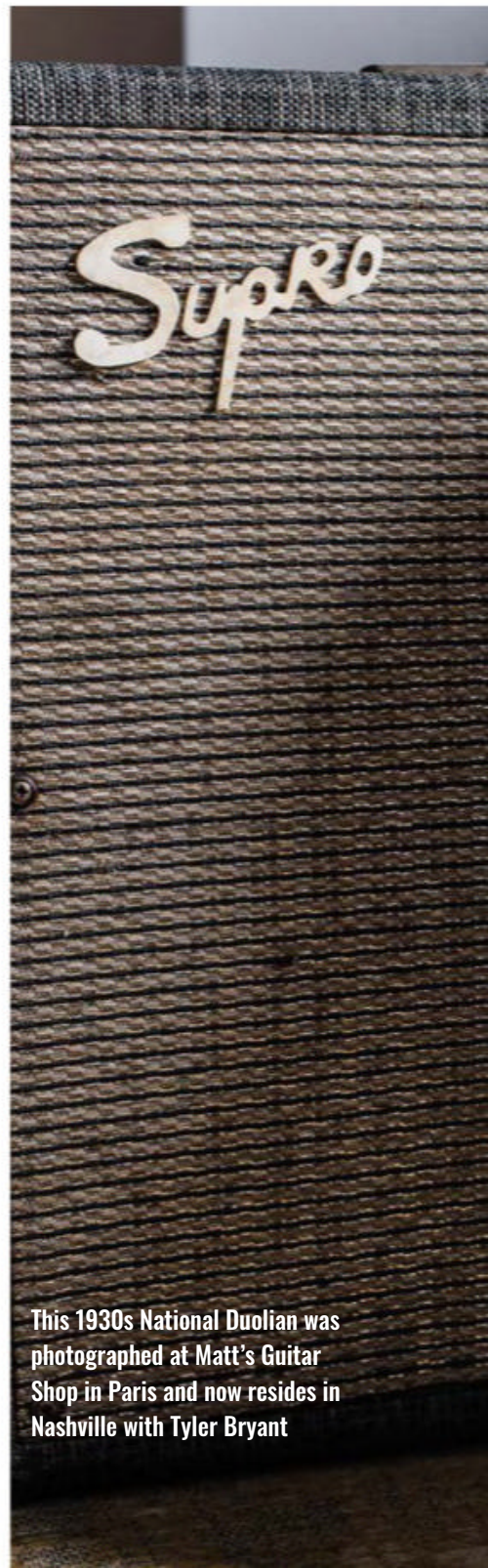
Musicians throughout the country acclaim this Rickenbacker instrument as truly outstanding. It offers professional styling . . . pure tone quality . . . ease of playing . . . plus the "built-in" dependability of Rickenbacker electric guitars. Available with six or eight strings.

MODEL G

MODEL A-22

MODEL A-22 — This instrument retains the original body design of the first Rickenbacker electric guitar. Its time-approved polished aluminum body is durable and will retain its lustre for a long time. The single-unit pickup is chrome-plated and position markings on the clear lucite fretboard are white-filled. Precision machined tuning keys will provide trouble-free use.

This model now has both volume and tone controls, conveniently located and spaced. Its design contributes to its being comfortable to play and easy portability. These features are combined with the finest electric guitar components to give the professional and non-professional musician an outstanding instrument that is a pleasure to own and play. The Model A-22 is available with six strings.

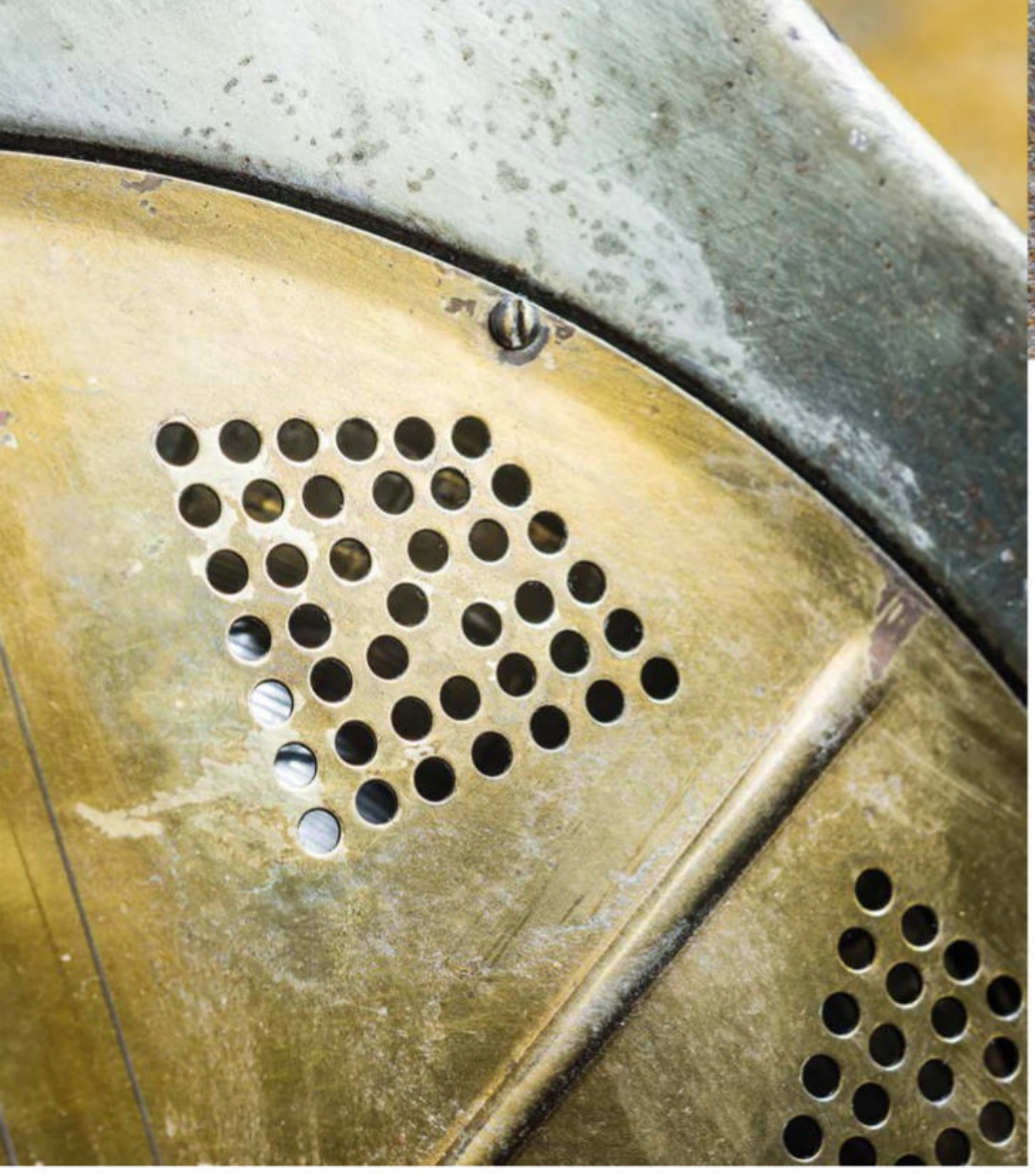


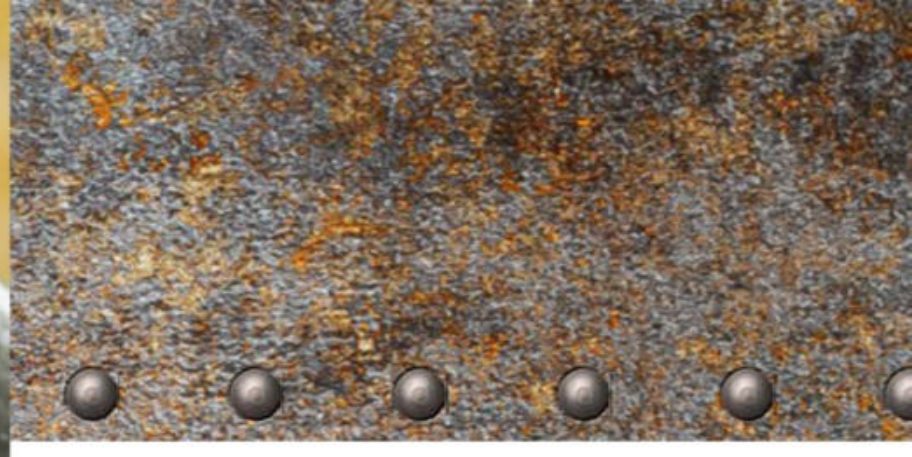
This 1930s National Duolian was photographed at Matt's Guitar Shop in Paris and now resides in Nashville with Tyler Bryant

The resonator guitar that George and his pals came up with was introduced in 1927 and had a gleaming metal body. Inside, depending on the model, National mounted one or three thin metal resonator discs or cones, underneath and connected to the bridge. These acted like mechanical loudspeakers to project the sound of the strings and give the guitars a powerful and distinctive tone. Other brands such as Dobro and Regal also made metal-body resonators at the time.

Not far from the National headquarters, Adolph Rickenbacker ran a tool-and-die firm where he made the metal bodies and resonator cones for National. George Beauchamp, Paul Barth, and Adolph teamed up to combine their fresh ideas for an electric guitar. They formed the Ro-Pat-In company at the end of 1931, shortly before George and Paul were fired by National.

In the summer of 1932, Ro-Pat-In began manufacturing Electro cast-aluminium electrics, designed for lap steel playing, where the player rests the instrument on their lap and slides a steel bar over the strings, generally tuned to an open chord. Small lap steels had been in vogue since the 1920s and the instruments were still tremendously popular.





It's worth emphasising that the 'steel' name came not because these guitars were made from metal – many beside the Electros were wooden, of course – but from the metal bar that players held in their left hand to stop the raised strings.

The Electro brand eventually morphed into Rickenbacker and, in about 1937, it began making small guitar-shaped steels from stamped sheet metal, often chrome-plated brass. Rickenbacker eventually decided that aluminium was an unsuitable material for such tasks, for reasons that every guitar maker who uses metal as a significant constituent in their instruments has had to consider.

Because the aluminium used in the steels expanded in hot conditions – under stage lights, for example – they could easily go out of tune. The differences in the way wood and metal change due to temperature and humidity have been enough to cause many makers and players to run quickly in the other direction from guitars that mix the two materials, especially in necks.

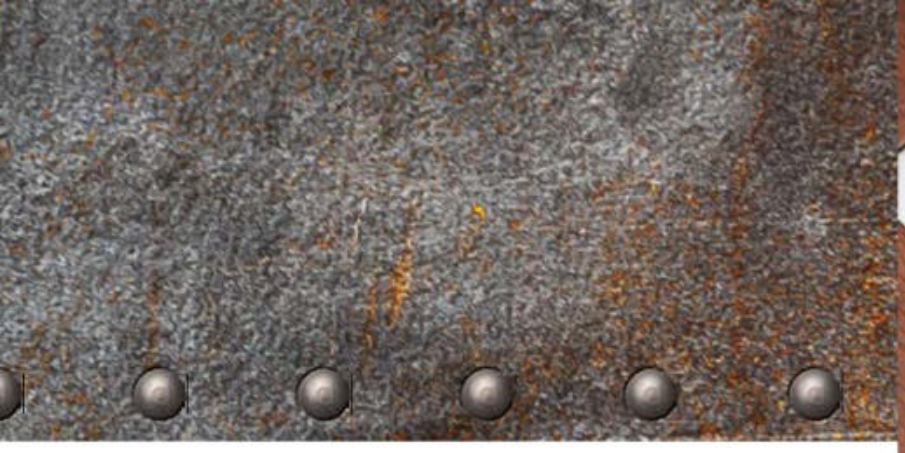
Gibson also briefly used cast aluminium for its first electric guitar, the Electric Hawaiian E-150 steel, which appeared towards the end of 1935. The metal body was clearly designed to compete with the look and style of the Rickenbackers but proved impractical for Gibson too. Early the following year, Gibson shifted to what it understood best, introducing a new version with a wooden body (and a slightly different name, the EH-150).

TRAVIS PICKING

Let's jump forward to the 1970s. We're still in California but by now brass had come into fashion as a hardware material thanks to its alleged qualities for enhanced sustain. Meanwhile, Travis Bean introduced his aluminium-neck guitars from Sun Valley in 1974 with his partners Marc McElwee and Gary Kramer. He was not, however, the first to use aluminium in relatively modern neck construction. That honour belongs to Wandrè Guitars from Italy.

Antonio Wandrè Pioli worked from the late 1950s into the 1960s, designing and producing a series of remarkable-looking guitars with some notable design features, among them the Rock Oval introduced in about 1958 and the Scarabeo in 1965. Pioli's instruments appeared with a variety of brand names, including Wandrè, Framez, Davoli, Noble, and Orpheum. But beyond Pioli's striking shapes were some interesting constructional features, including an aluminium neck section. The best version had a through-neck consisting of a hollow semi-circular aluminium tube leading to a frame-like headstock, with the fingerboard screwed on and a rear plastic cover to provide a suitably smooth feel.

By the late 1960s, Wandrè guitars had vanished. But the idea of the aluminium neck took a fresh hold with Travis Bean, who hollowed out a good deal of the inside of the neck to create what he called a chassis



Travis Bean's TB1000S had an innovative aluminium alloy through-neck design

for his aluminium alloy through-neck, which included a T-frame headstock and had the pickups and bridge attached, the whole completed with a wooden body. He said this provided consistent rigidity and therefore good sustain, and that the additional mass reduced vibration. But the business was short-lived. The Travis Bean company ceased trading in 1979.

Travis reappeared briefly in the late 1990s and a new revival, Travis Bean Designs, is still in operation in Florida. Meanwhile in Irondale, Alabama, the Travis Bean-influenced Electrical Guitar Company is also keeping the flame alive.

Travis's partner Gary Kramer left to start his own company in 1976 and began his take on the aluminium-neck scheme. Working with guitar maker Philip Petillo, Gary made some modifications. He placed wooden inserts into the rear of the neck in order to overcome criticisms that the metal of the Travis Bean necks felt cold, and he used synthetic ebonol fingerboards. By the early 1980s, Kramer was offering conventional wooden necks as an option and gradually the aluminium was dropped. A revival by Henry Vaccaro and Philip Petillo, at first with the Kramer name and then with Vaccaro's, lasted from the mid-1990s until 2002.

John Veleno went further still with his guitars, making them almost entirely from hollow aluminium, with cast necks and hand-carved bodies. Based in St Petersburg, Florida, Veleno began to produce his unusual instruments in about 1970, and he finished them in bright anodised colours, including an arresting gold variant. Some of them had a V-shaped headstock with a red jewel set into it. He gave up in 1977 after building about 185 guitars.

Another custom maker who used aluminium in an individual way was Tony Zemaitis, a British builder based in Kent. He began making metal-front instruments when Eric Clapton suggested that Tony should make a silver guitar. He developed models with an aluminium plate covering the whole front of the body. Many of Tony's creations featured the work of a shotgun engraver, Danny O'Brien, whose finely worked designs provided a distinctive look. As well as some other electric and acoustic models, Tony built Zemaitis metal-front guitars from about 1970 until his retirement in 2000. He died in 2002.

FRENCH FLAVOUR

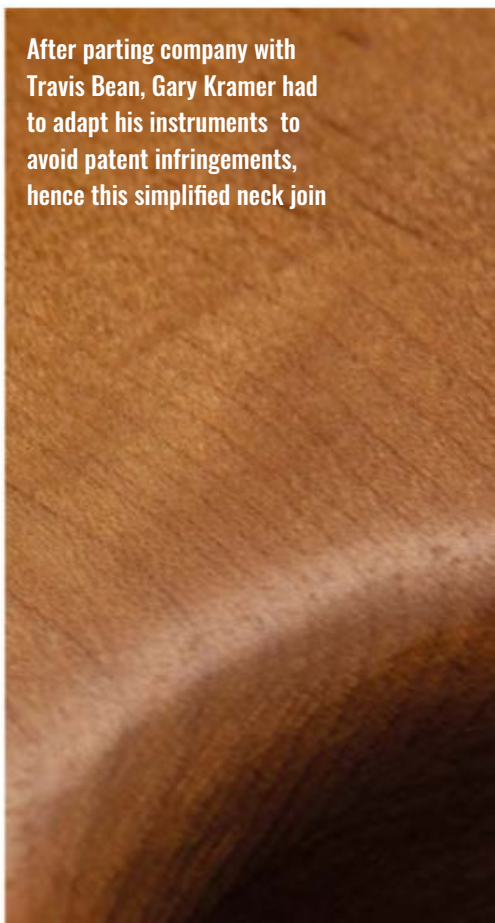
James Trussart has done much to keep alive the distinctive qualities that metal can offer in modern guitar making. Born in France, he moved to the US and eventually located his workshop in Los Angeles, where he's been for more than 20 years. He continues to make custom steel-bodied guitars and violins in an array of finishes, combining the metallic look of resonator guitars with the rusty, patinated vibe of discarded machinery.

It was Billy Gibbons who came up with the name for the Rust-O-Matic technique, in which

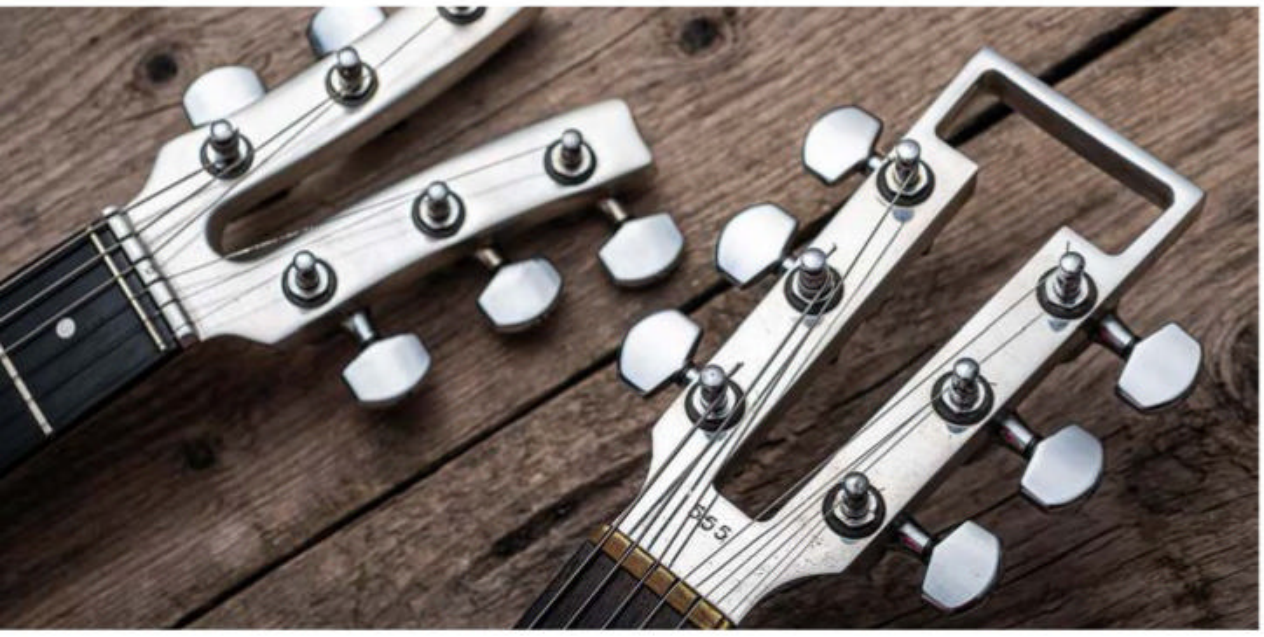
James leaves a guitar body at the mercy of the elements for several weeks before finishing it off with a clear satin coat. Many Trussart guitars have patterns or designs imprinted into the metal bodies (or on the pickguard or headstock), including skulls and tribal art, and textures of alligator skin and plant material.

James Trussart isn't the only Gallic luthier to incorporate metal bodies into his builds. Loic Le Pape and MeloDuende have both featured in these pages in the past. Unlike Trussart, however, these brands remain based in their native France.

Elsewhere, makers have occasionally offered conventional electrics with an unusual metallic twist. Consider, for example, the few hundred mid-1990s Stratocasters that Fender produced with hollow anodised aluminium bodies. There have been some very unconventional guitars with metal at their core – such as the short-lived 1980s SynthAxe, its sculptural fibreglass body set on a cast metal chassis.



After parting company with Travis Bean, Gary Kramer had to adapt his instruments to avoid patent infringements, hence this simplified neck join

This 1970s Kramer DMZ-2000 and Travis Bean TB1000S Standard are available at the next Gardiner Houlgate guitar auction on 10 March 2021. Visit guitar-auctions.co.uk for more

Matt Eich of Mule Resophonic is making some of the most beautiful resonators in the world today

There have been metal fingerboards too, from K&F (briefly) in the 1940s to Vigier's current fretless 'board. And there have been finishes designed to make otherwise conventional wooden electrics look enticingly metallic – think Gretsch's Silver Jet from the 1950s, plastered with sparkly drum covering, and the JS2 variant of Joe Satriani's signature Ibanez models, introduced in 1990.

The original JS2 was quickly withdrawn following its release, as it soon became clear that its chrome finish was almost impossible to produce with safe results. The issue was that chrome would lift from the body and form cracks, not ideal and dangerous for the guitar, as well as perhaps for the player. It seems the Fujigen factory completed only seven JS2 chrome guitars for Ibanez, including the three given to Joe, who had to put heavy clear tape over the cracks of his own favourite example, which he nicknamed Chrome Boy, to prevent ripping his skin open.

Fujigen tried plating the body traditionally by dipping it in a solution but that resulted in spectacular explosions. Again, far from ideal. They tried vacuum plating but gas inside the wood was forced out by the pressure, which made the chrome change to a nickel colour. Also, workers experienced electric shocks when they tried to buff the finished bodies. Ibanez was left with no alternative: the JS2 was cancelled. However, there were two later and successful limited-editions: the JS10th in 1998 and the JS2PRM in 2005.

NO LIMITS

Ulrich Teuffel has been producing guitars in southern Germany since 1995. With its skeletal plated-aluminium frame that takes the conventional notion of metal hardware and turns that into a sort of un-body, his Birdfish model looks nothing like regular guitars. The 'bird' and 'fish' of its name are the two metal elements to which a pair of wooden body bars are screwed: the bird is the front section to which the neck is bolted; the fish is the rear section that holds the control pod; and a rail in between the two holds its moveable pickups.

"Philosophically, I like the idea of having crude material coming into my workshop, doing some magical things here, and then the end is the guitar coming out," says Ulrich. "I think the Birdfish is an instrument that takes everyone who plays it on a particular trip. Because it tells you how a guitar could be made."

Our story ends with a full circle back to where we started with the original resonator guitars of the 1920s. Guitars that draw from this tradition provide most of the current action for metal-body constructions, from brands such as Ashbury, Gretsch, Ozark, and Recording King, as well as modern incarnations of Dobro, Regal, and National, and boutique builders such as Michigan's Mule Resophonic.

Mike Lewis at Fine Resophonic in Paris has been making metal-body guitars for about 30 years, and he works with brass, German silver, and sometimes steel. "It's not because one or the other of those is 'better' but that they have very different sounds," he says. "For example, a vintage National Style 0 is always brass, a National Duolian or Triolian is always steel,

This MeloDuende was commissioned by Rival Sons star Scott Holiday

James Trussart's SteelReso model takes distress to extremes

and most of the old Tricones were made from German silver, a nickel alloy. And they provide three completely different sounds."

What's the worst thing and the best thing about working with metal for guitars today? "The worst is probably when you hand a guitar over to be nickel-plated and they mess it up. It can happen. The best thing is that it's quite easy to make custom shapes without too many tools. And there are no restrictions on buying metal – like, say, Brazilian brass," Mike concludes, with a chuckle. "But it's always nice when the strings are on and I can play it." G

Loic Le Pape is another French luthier specialising in mesmerising metalwork

Gibson

20TH CENTURY TOYS

WORDS MICHAEL WATTS
PHOTOGRAPHY ELEANOR JANE

We head to London to meet a British guitar collector with a penchant for vintage Gibsons and an eye for detail

Guitar collectors who set their sights on big-game vintage pieces often get a bad rap for their presumed Smaug-like acquisitive impulses and their tendency to lock guitars away, doomed to remain unplayed behind glass or in bank vaults. It's a rather unfair stereotype, of course, and in the case of the collector we're meeting today, that cliché could not be further from the truth.

A phenomenal blues player and a former acolyte of Robert Fripp's League Of Crafty Guitarists, our host's real life in advertising eventually took him in a different direction. But it's no exaggeration to say that Bob can more than hold his own as a guitarist. Due to the high value of some of the instruments in his collection, the precise details of Bob's identity and location remain closely guarded. But those of you who trawl YouTube for guitar content may have seen him appear as a co-presenter with his friend Ramon Goose on The Guitar Show, as well as on his own Rockbeare Guitars channel.

Bob's guitar arsenal is extremely varied and contains many exceptional instruments. Here, however, we're concentrating solely on the vintage end of the spectrum, as Bob talks us through the highlights, from gorgeous Gibsons to a Gretsch, a Guild and a very special Strat. Buckle up, it's going to be one hell of a ride.

Bob's 1955 Gibson Les Paul Junior was purchased on his 60th birthday

ABOVE Bob's 1960 TV Yellow Junior has a 1959-style neck profile

ABOVE RIGHT This 1964 Firebird VII is as rare as it is delicate

RIGHT Bob describes his LP Special as "quite a legitimate instrument for a blues situation"

1955 GIBSON LES PAUL JUNIOR

"This was bought on my 60th birthday because I'm a 1955 too. The P-90 is slightly closer to the bridge, which can be an issue, as the bridge posts often lean forward and crack the wood. That hasn't happened here. If you want the Leslie West sound, this does it.

"It has an original snakeskin cardboard case, which I bought later. Those things are going for silly money. When we look at the '58 Burst, I'll tell the story of the switch tip, which truly puts me in the category of dangerous psychotic wanker!"

1960 GIBSON LES PAUL JUNIOR

"I've had this one for a while now. The serial number puts it well into 1960 but it has a big 1959 neck profile. It's all original and in fabulous condition, and it's a loud guitar! I love gigging this guitar. It stops traffic.

"All the TV Yellow Juniors had 'TV model' on the headstock decal but from late '59, the Specials did not. I don't know why. The Special we'll see next is blank."

1960 GIBSON LES PAUL SPECIAL

"This is the two-pickup Special – another slab-body student model. It is not as immediately appealing as the double-cut Junior, especially at low volumes,

ABOVE Bob's treasured 1962 Strat and 1954 Les Paul. This pair of golden wonders would cover most musical bases in considerable style

but you get the added flexibility of the neck pickup, which in this case is very sweet.

"When you crank it up, it really does speak – quite a legitimate instrument for a blues situation. If you go by the serial number, this is an earlier guitar than the TV Junior. But the neck is very definitely a 1960s skinny carve.

"I've never been that keen on the bound fingerboard. From a feel point of view, I like the unbound Junior necks more. It's a personal thing. It's a great guitar though and it gets a fair amount of use from me."

1964 GIBSON FIREBIRD VII

"It's a corking guitar, this – but it's more fragile than biscuits. It belongs to a very dear friend and it's here for a sleepover but, what the hell, we might as well show it off!

"These are very rare guitars. They only made 173 that year and 382 ever. The middle position is the middle and bridge pickups together – the same as a Les Paul Custom. Provided you don't try and dive-bomb on this guitar, the Vibrola really adds a fantastic amount of movement and shimmer to the sound. I wasn't sure at first but it's grown on me!

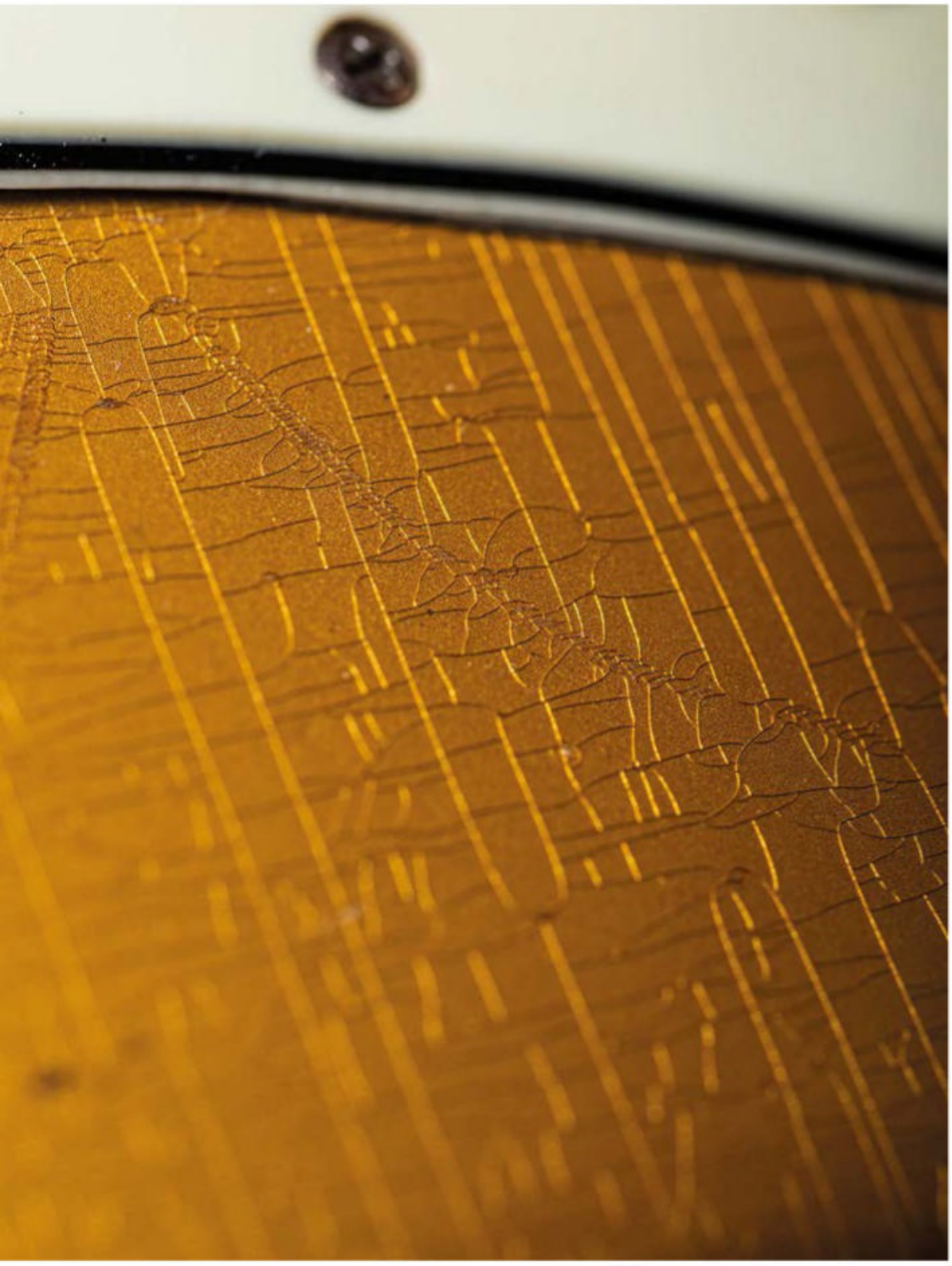
"These guitars are very famous for breaking – they have that long headstock, the banjo tuners that get caught on anything near you, there's no neck volute and, if you try and lean one against an amp, it's going to plummet downwards. They're pretty heavy guitars with no real balance to them until you strap one on. Then they feel wonderful.

"A lot of players don't like triple-humbucker guitars because they say that the middle pickup gets in the way but I'm a big fan of a centre-mounted pickup, as you'll see!"

1954 GIBSON LES PAUL

"This Les Paul has got dear [famed guitar tech to the stars] Bill Puplett's label on the case. The trouble with playing a lot of really nice guitars is that it's rare for one to become a true extension of you, as you're constantly flirting with the whole collection. But I know that this guitar will follow wherever the music takes me.

"This is the second iteration of the Les Paul. I think it's the nicest-looking configuration – it's very pleasing. This one has a pretty typical '54 neck carve, quite round. The original frets were on it when I bought it and they were absolutely worn out.



THIS PAGE The Strat's finish has yellowed considerably over time but it wears its age well, with gorgeous checking

FACING PAGE Bob wasn't sure about buying this '58 Les Paul Standard back in 1998 but was convinced by a smart dealer

I had it refretted with high, narrow wire so I can grip the strings and bend but the frets still look pretty authentic from the front.

"It's quite a growly guitar, which is typical for that period of P-90, and it opens up with a bit of heft – it's just wonderful at stage volumes."

1962 FENDER STRATOCASTER

"I've had this guitar since 1974. The neck and body are November 1961 and February 1962, respectively, if memory serves. I've had it refretted and the bridge pickup had to be rewound because it went 'open-circuit'. I had the tremolo and saddles re-chromed and, while I have the original switch, this is now a five-way. Everything else is stock.

"One thing that makes it slightly unusual is the Shoreline Gold finish, which is rare on a slab-board '62 Strat. Over time, the yellow on this guitar has got deeper, making the gold even more vibrant – with no signs of calming down!

"It sounds great and has a thick neck – much bigger than most skinny Strats of the period – which suits my hands. This was my main guitar for years and it has been played a lot. The years for Strats are '57 and '62, and a rare custom colour in good condition is a joy.

"Leo was a genius who applied the principles of mass manufacture to a hitherto craftsman-built instrument. He was so involved with the artists as well, and those close relationships played a vital role in the development of his instruments. And he built a guitar that a chimpanzee with a screwdriver could mend in between songs! All of these things are marks of a truly customer-facing, user-oriented business and a master of design. I'd love to have met him."

1958 GIBSON LES PAUL STANDARD

"I've had this since 1998. I was actually looking for a '57 or '58 Goldtop. At the time, I didn't have enough experience with vintage guitars to know what I was buying so I relied on the expertise of dealers. One dealer in particular took me seriously and invited me in whenever something special came through, like a 1958 Flying V, for instance.

"One day he called me about a guitar and came round to my house. When he opened the case, I saw the Burst and said, 'No, no, no – this is big league… I don't think I can do this'. But I trusted him and I'm glad I did. It was a lot of money back then but it's worth a great deal more now. I will play this guitar until my fingers fail.

"I love this guitar because it's a relatively plain Burst. It came from the same batch as Mark Knopfler's '58 and he likes a plainer Burst too. At the time, sales of Goldtops were dropping off, so Gibson tried sunburst finishes. But by late 1960, they discontinued the guitar altogether and stuck the Les Paul name on the new SG shape.

"Now the story of the switch tip. I have to admit that the guitar is currently wearing a Mark Foley reproduction switch tip from five years ago. When I bought the guitar originally, the underside of the switch tip had a slight crack along it and one day it just went. I knew it was going to happen. You try and prepare yourself for a day like that.

"I got in touch with Clive Brown, who was about to go out to [US vintage guitar show] Arlington, and asked him if he could look out for one for me, which he did. It cost $400. That's what kind of idiot you're talking to – 400 fucking dollars.

"With a real switch tip, you can smell the Catalin when you heat it up. Of course, that's a closed club, as you have to have one in the first place to heat it up and sniff it!

"One of the great obscenities about one of these guitars – aside from the idiots who are prepared to pay hundreds of dollars for a switch tip – is the price of original vintage pickup surrounds for the sharper-cornered original pickups. You're looking at five figures for a pair of vintage pickup surrounds in good condition and with provenance. I mean, go away!"

ABOVE Bob bought his 1959 ES-335 sight unseen over the phone. We'd say that was a good call

FACING PAGE This triptych of single-pickup hollowbodies is made up of two ES-330s and an Epiphone E-230T

1959 GIBSON ES-335

"This guitar has an original overcase – which is perhaps the most interesting thing about this ensemble in terms of sheer scarcity. It was a gift from a dear friend – a very emotional moment! It's a raincoat for your guitar case. They were common in the 1950s, particularly on the jazzboxes. But they are also highly perishable, and very few of them have survived. The case itself is in remarkable condition and the guitar even more so. You would be hard-pressed to describe it as anything other than mint.

"I bought this guitar sight unseen over the phone from a dealer in the USA. The price was slightly chunky and I had no idea it was going to be this good. It's interesting because, here in Europe, it's more caveat emptor but in the USA, if you ask the right questions, they will give you honest and detailed answers. It's your job to know what the right questions are.

"The tuner buttons are replacements – the originals have crumbled and I have them in a plastic bag. There are two reasons buttons deteriorate: the instability of the plastics of that era and the lining of the case, which gas off and corrode any gold hardware on the guitar and advance any innate instability in the plastic.

"This is my scariest guitar. Not because of its condition and value but because it looks at me as a musician and says 'You'd better be serious' in a way that the Burst doesn't."

SINGLE-PICKUP HOLLOWBODY TRIO

"I don't even like Cherry guitars much but this 1961 ES-330 is my favourite of the collection. Every time I pick it up, I'm truly home. Serious 330 collectors will sniff at it because it's a single-pickup but these guitars are infinitely superior instruments because you don't have any phantom pickup loading, and the centre mount is an incredible sweet spot for a P-90.

"Now, I don't go for two of anything as a rule but I bought this guitar and liked it so much that I decided to get another one. So I now also have this 1960 blonde, which is almost as good a guitar.

"Having broken my own rule, I decided to look for a sunburst to compete the set. By accident, I came across this Epiphone E-230T online. Everything else that the dealer sold was seven-string and pointy, so obviously what happened is that grandpa had traded in his old guitar so that Little Billy could get a shred guitar. That meant the dealer had something in his inventory that didn't suit him and he was selling it at a good price.

"This is a very unusual guitar. It's a 1962 and, being an Epiphone, the differences are the headstock and the trapeze. Everything else is the same. I believe there was just one production batch of these – that's 36 guitars in double and single-pickup configurations, so probably only 11 of these were made. I feel very lucky to have it.

ABOVE Bob's 1957 ES-225 was so pristine when he bought it that he was worried he'd been duped

RIGHT An "awful" Gallien Kruger amp made way for this 1953 ES-175

OPPOSITE TOP LEFT Bob isn't a Gretsch man but this '56 Duo Jet is surely enough to convert even the most stoic Gibson diehards

OPPOSITE TOP RIGHT The acquisition of this '65 Texan was inspired by Al Stewart

OPPOSITE BOTTOM Nick Drake fan? Nuff said

"These guitars do take off at higher volumes. I asked Gary Clark Jr how he stopped 330s feeding back. He said, 'Got some old pyjamas?' Vince Gill's tech suggested an even better trick: those long thin party balloons that clowns bend into poodles. Shove a couple of those in through the f-holes and inflate them! I haven't tried it yet but that method is completely non-invasive for the wiring, whereas with the pyjamas, you run the risk of knocking something out of place."

1957 GIBSON ES-225

"This guitar has a similar story to the Epiphone in that I won it by accident in an online auction while getting a sandwich. It was out in Australia and when it arrived I opened it up and thought, 'Oh no, it's a fake'. It was just too clean. Like so many guitars, the scratchplate has dished a little; the different layers shrink at different speeds.

"In this case, the single middle pickup sounds like the in-between position in a double-pickup guitar. I know that's technically impossible but it's true. There's a gleam to it. It's not the easiest guitar to play, with its skinny frets and round, wide neck. But they're whooshing up in value now."

1953 GIBSON ES-175

"This guitar sounds wonderful and really projects acoustically. Obviously it's worked for its life. There's sweat rash on the back and the case is that nasty green but it's old and honest. I traded it for a Gallien Kruger amplifier, which was basically awful, in a straight swap.

"A lot of the 1950s ES-175 and ES-225 models have been stripped for parts, sadly. Although you couldn't swap out the switch tip and put it on a Burst as the top is the wrong shape, in case you were wondering. Thankfully I have two or three friends that are prepared to indulge this kind of conversation!"

1956 GRETSCH DUO JET

"I was collecting Les Pauls but I do like other single-cuts. I've never really got on with Gretsch guitars – it's been mutual, in fact – but I persisted and eventually found this one for sale in Germany. They changed the spec on this guitar almost every time they made it. They used different logos, inlays, bridges and tailpieces, pickups. Vintage Gretsch guitars, especially the bigger bodies, often have binding issues but this one has been stable."

1965 EPIPHONE TEXAN

"This guitar came in an unusual but authentic Epiphone cardboard snakeskin case. It's got a nice sound – medium heft, not too beefy. These are considered great singers' guitars and the reason they are pricey is that Paul McCartney wrote *Yesterday* on his. I bought this because I worshipped Al Stewart and he played one. The only thing about this guitar is that the distance between the strings and the soundboard is not particularly big so installing a soundhole pickup is difficult – most of them protrude too much."

1964 GUILD M-20

"Look, it's the same model as the one on the cover of *Bryter Layter* and I'm a massive Nick Drake fan. It's really that simple…"

To see and hear more from Bob's guitar collection, visit rockbeareguitars.com

VINTAGE BENCH TEST

1960s FENDER DELUXE SHOOTOUT

WORDS HUW PRICE
PHOTOGRAPHY ELEANOR JANE

Fender Deluxe amplifiers date back to the early days of the company but, by the mid-1960s, they were almost unrecognisable when compared to amps from the tweed era. We take a look at what happened during the first half of the 60s and compare amplifiers from the brown and black-panel periods

By the time Fender introduced the Deluxe Reverb in 1963, its resemblance to the first tweed Deluxe – the 5A3 of 1948 – was virtually non-existent. During the intervening years, there were numerous other Deluxe models released into the world as the circuitry, cosmetics, output power and onboard features gradually evolved.

Most of you will be aware of the three distinct eras of pre-CBS Fender amplification – tweed, brown and black-panel – but a surprising amount changed in just a few short years in the early 1960s. Here, we're comparing a 1961 brown Deluxe with a 1965 Deluxe Reverb courtesy of boutique guitar-recording and reamping studio Vintage Tone Factory.

6G3 FENDER DELUXE

The last of the tweed Deluxe models were made in 1961 and, the same year, Fender revolutionised the Deluxe amplifier. It was a new look for a new decade, with brown Tolex covering a larger pine cabinet and a brown control panel on the front with white labelling.

Round brown 'cupcake' control knobs replaced the old-school chickenheads but the tweed Deluxe's two-channel arrangement was retained. Fender finally acknowledged that nobody was plugging microphones into their guitar amps and the new channel designations were 'normal' and 'bright'.

Up to and including the 5E3, all Fender Deluxes were cathode-biased, and the brown Deluxe was the first to have fixed-biased 6V6s. This allowed Fender

TOP Although the cabinet shape and front-facing controls continue to feature on Fender amps decades later, the brown Tolex and control panel seen here were short-lived

ABOVE LEFT The 6G3's tremolo circuit delivers a glorious throb

ABOVE MIDDLE The original driver was likely an Oxford ceramic but the 6G3 now sports a Celestion Ruby

ABOVE RIGHT Tube charts can be helpful when dating vintage Fenders

the opportunity to adapt the oscillator circuit from the tweed Vibrolux and make the 6G3 the first Deluxe with onboard tremolo.

The brown Deluxe also ushered in a new era for speakers, with ceramic Oxfords gradually replacing alnico Jensens – though our test subject is now fitted with an alnico Celestion Ruby. Besides a replaced leather handle, this amp is near-mint cosmetically and completely original externally. But that's no guarantee it's in similarly authentic condition electronically.

Relatively little electronic work has been done beyond a sympathetic restoration and some safety enhancements. Most of the original blue Ajax signal capacitors have gone but the SoZo replacements look the part and the cloth-covered wiring appears almost new too.

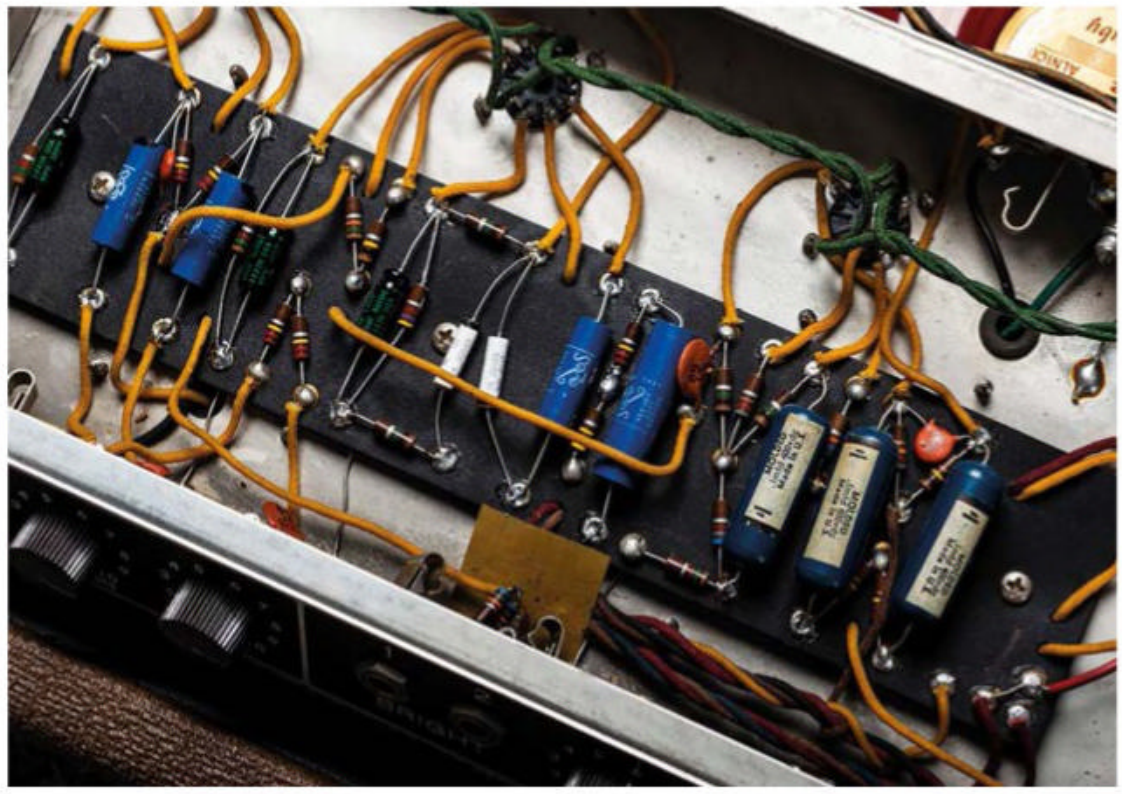
All of the electrolytic capacitors are replacements and, with the exception of one resistor on the bias board, the resistors are all original carbon composites.

KEY FEATURES

1961 FENDER 6G3 DELUXE
DESCRIPTION 2-channel, 1x12 combo with tremolo, made in the USA
POWER RATING 20W
VALVES 3x 12AX7, 2x 6V6, GZ34
CONTROLS 2x volume and tone; speed, intensity
REAR PANEL Ground, fuse, internal speaker out, extension speaker out, tremolo pedal footswitch input
DIMENSIONS 445 x 508 x 241mm
WEIGHT 13.9kg/30.6lb
CONTACT Follow Vintage Tone Factory on Instagram @vintagetonefactory

Mallory 150s have also replaced two of the tremolo capacitors and, thankfully, there's a grounded mains cable here.

For the 6G3 circuit, Fender used post-output-transformer negative feedback in a Deluxe for the first time since the tweed 5C3. The 5E3's zero-gain cathodyne phase inverter was abandoned in favour of a long-tail pair type, with a 12AX7 that's able to push the power tubes into overdrive.



Only two components differentiate the bright and normal channels, with the latter having a 0.01uF capacitor on its separate tone control rather than a 0.02uF. There's also a 0.002uF bypass capacitor across the first tube's plate resistor in the normal channel that dumps some treble content to ground.

The two channels reconvene before their shared second gain stage via two 220k mixer resistors. These effectively separate the two channels and eliminate the volume control interactivity that many players use to shift 5E3s into wilder territories. Final tweaks include a more robust GZ34 rectifier tube that raises B+1 voltage to a nominal 375v. This combines with the fixed biasing to increase power from the 5E3's 15 watts to the 20 watts here.

AB763 FENDER DELUXE REVERB

With enough clean headroom and volume for today's gigging environment, plus sumptuous onboard spring reverb and tremolo, convenient portability and sweet overdrive when pushed, it's not particularly difficult to see why so many players regard the Deluxe Reverb as the ultimate do-it-all Fender amplifier.

However, not all black-panel Deluxe Reverbs were created equal and our first task is figuring out which model this is. The first version of the Deluxe Reverb was the AA763. Fender subsequently made a few minor modifications to increase clean headroom, which included reducing the tail resistor value from 27k to 22k and changing one of the plate resistors from 100k to 82k.

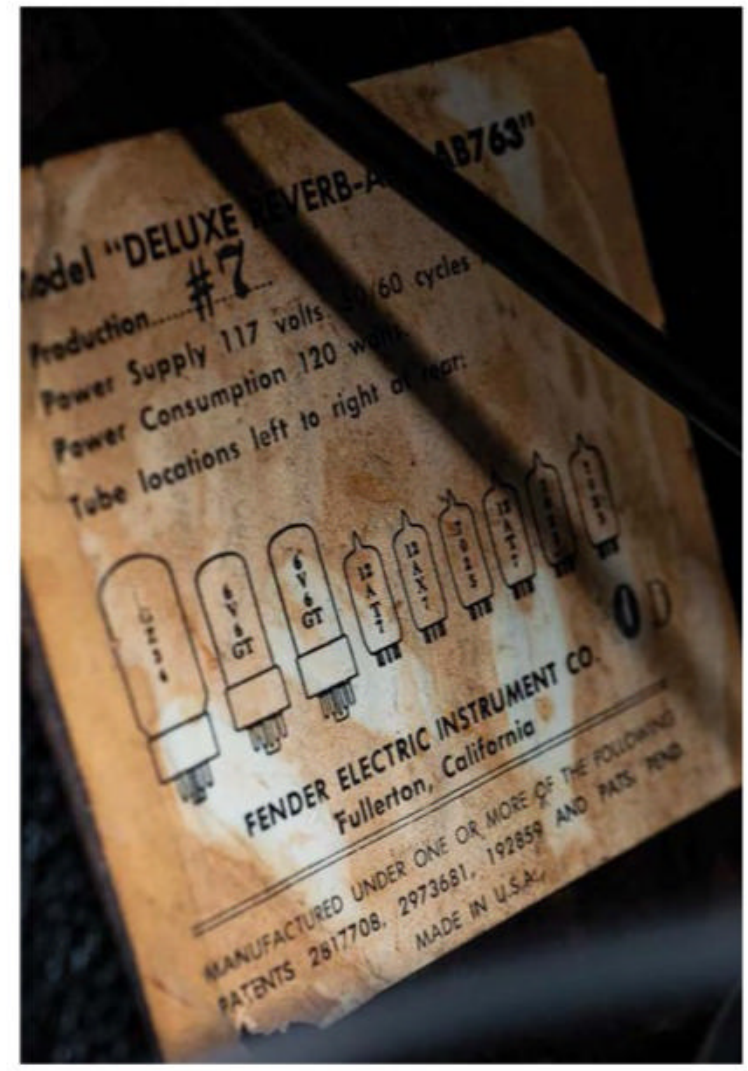
The reverb mix resistor went from 4.7M to 3.3M to make the reverb level less dominant and grid-stopper resistors were reintroduced for the 6V6s to control blocking distortion and sweeten the overdrive characteristic. The value of the tonestack's midrange capacitor was also altered.

TOP LEFT The brown Deluxe would have had blue Ajax capacitors but some have been replaced with Sozos

TOP RIGHT RCA valves may have been fitted at the factory but these NOS United Electron 6V6s sound excellent

BOTTOM LEFT Here the 68k stopper resistors are soldered directly onto the input sockets

BOTTOM RIGHT Though Fender favoured eyelet boards for most of the circuit, some components were wired point-to-point



ABOVE LEFT RCA sockets on the back panel provide connections for reverb send and return, and the footswitch

ABOVE RIGHT Confused about which tubes to use and where to install them? Simply consult the tube chart

BOTTOM LEFT Both channels have high and low inputs

BOTTOM RIGHT Our Deluxe Reverb still sports its original footswitch for reverb and tremolo switching on the fly

Finally, the cathode resistor on the driver side of the tremolo valve was increased from 56k to 100k and the model designation became the AB763. It's considered the ultimate version of the Deluxe Reverb and it's the one we have here.

Further changes followed in about 1967, when CBS introduced new silver cosmetics. Many players prefer the earlier versions and converting silverface Deluxe Reverbs to black-panel specs is common.

This amp's tube chart has an 'OD' stamp, which corresponds with April 1965. The chassis number and original transformer codes are consistent with this but the power transformer is a modern TAD replacement.

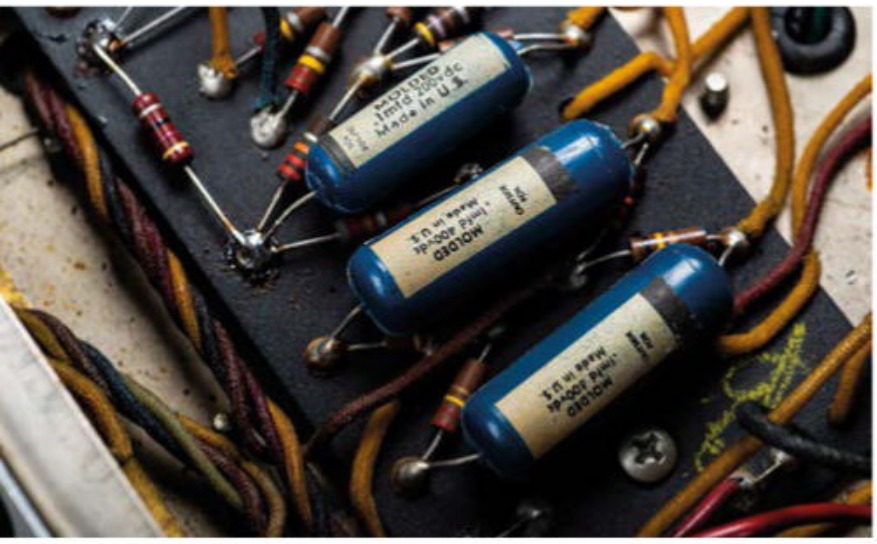
Fender's standalone reverb unit was introduced in 1961 and, by 1963, it had begun incorporating onboard spring reverb into its amps. Fender simply persisted with established model names and tagged 'Reverb' on the end. The Deluxe Reverb cabinet is wider than the 6G3's and the differences between the circuits are so numerous that it's tantamount to a complete redesign. Here we'll confine ourselves to explaining the key differences.

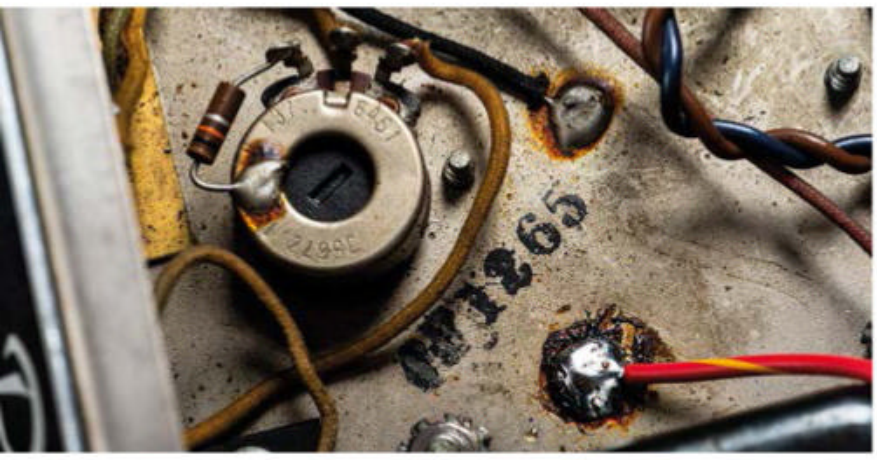
The long-tail phase inverter was retained, along with the fixed-bias 6V6 power tube pairing, but a 12AT7 phase-inverter tube was used rather than a 12AX7. The 6V6s got a nominal 415v on their plates, which actually exceeds their recommended maximum voltage, and Fender added screen and stopper resistors.

The tremolo was redesigned and, rather than acting on the power tube bias, it's applied to the preamp stage of the vibrato channel, before the phase inverter.

Unlike the brown Deluxe's single-triode tremolo circuit, the black-panel design uses both sides of a 12AX7 and an optocoupler, which combines a light source and a photoresistor.

The spring reverb feed comes after the tonestack. A 12AT7 is configured in parallel as a driver for the spring pan and a single 7025 triode stage is used for





KEY FEATURES

1965 FENDER AB763 DELUXE REVERB
DESCRIPTION 2-channel 1x12 combo with spring reverb and tremolo, made in the USA
POWER RATING 22W
VALVES 3x 7025, 2x 12AT7, 2x 6V6, GZ34
CONTROLS 2x volume, bass and treble; reverb, speed, intensity
REAR PANEL Ground, voltage selector, fuse, internal speaker out, extension speaker out, tremolo and reverb footswitch sockets, reverb tank output and input
DIMENSIONS 445 x 610 x 241mm
WEIGHT 16.8kg/37lb
CONTACT Follow Vintage Tone Factory on Instagram @vintagetonefactory

ABOVE Besides the electrolytic capacitors and a few resistors, this Deluxe Reverb's main circuit board is in pristine original condition

LEFT TOP These blue coupling capacitors are typical of the era. They rarely leak and sound superb

LEFT BOTTOM This internal trim potentiometer makes it quick and easy to dial in the correct bias voltage for the power tubes

signal recovery before the reverb and the dry signals are recombined via a reverb level control and a mixer resistor.

The normal and vibrato channels are similar – but only up to a point. Reverb and tremolo are only applied to the vibrato channel and there's a 47pF bright cap across the vibrato channel's volume control. By incorporating reverb, the signal level was lowered, so the vibrato channel was also given an extra gain stage to make up the difference. The effects and extra brightness mean that many Deluxe Reverb owners ignore the normal channel altogether.

All of these features are significant but it's the Deluxe Reverb tonestack that makes the biggest sonic difference. For both the reverb and non-reverb black-panel Deluxes, Fender moved to a more sophisticated treble/middle/bass tonestack – albeit with fixed mids.

With the treble and bass at zero, the frequency response is nominally flat. But with both set higher, it's often described as a mid-scoop. In reality, once it has passed through a second gain stage, it's more of a bass and treble boost.

Externally, this Deluxe Reverb amp is not in quite such fine condition as our 6G3 Deluxe. But electronically, it's closer to factory spec. There's a full complement of blue Ajax signal capacitors and only the electrolytics have been renewed. A couple of 1R resistors have been connected between the 6V6 cathodes for easy bias setting, and the preamp plate resistors have been changed to keep noise levels low.

This amp has also been safely grounded and runs on UK mains voltage thanks to a factory selector switch on the rear panel. The original speaker was likely an Oxford 12K5-6 but the Eminence GA-SC64 here is an appropriate modern alternative.

IN USE

It's likely that you'll have played a Deluxe Reverb or something very similar at some point. The same cannot be said for the rarer 6G3 Deluxe, however, since it was a stopgap model only made from 1961 to 1963 and it was something of a one-off even in the context of brown-panel Fenders.

Billy Gibbons used a brown Deluxe on the early ZZ Top albums and Joe Bonamassa is a big fan, with some regarding these amps as mini Marshalls disguised as Fenders. The main reason for that is that the first tube has 220k plate load resistors rather than the usual 100k units, and the cathodes share a 1.5k resistor.

TOP The black-panel amps were the first to be fitted with witch-hat control knobs, which have remained a Fender staple ever since

BOTTOM Although it's in fine condition, this Deluxe Reverb shows its age more than the older Brown Deluxe

This results in a very hot front end similar to the blonde Bassman, so the brown Deluxe is naturally inclined towards overdrive.

With a Telecaster, the amp stays clean up to about three, by which point things have gotten reasonably loud. It's a warm and wonderfully clear tone, with such touch sensitivity that we've never played another 1960s Fender amp that makes us feel so musically connected.

The tremolo is deep and strong yet never interferes with the front of notes. Nor does it ever seem to be at the wrong stage in the cycle when you want some punch and definition. It's swampy perfection.

Push things beyond three and you hit overdrive heaven, as the tone smooths, blooms and eases into uncanny sustain. There are enormous amounts of overdrive available here but the 6G3 has none of a 5E3's ferocious fuzz or boxiness – and it holds together far better.

We find the Marshall analogy a little misleading because it's largely based on the 6G3's appetite for overdrive. The brown Deluxe tone is more cultured, devoid of fizz, and has a creamy, righteous growl that doesn't sound remotely 'British' in origin, even with this Celestion speaker onboard.

To get the most out of it, you need to get used to the volume and tone control interaction. Both increase the gain as they're turned up but the volume control also adds girth, while the tone control emphasises treble frequencies.

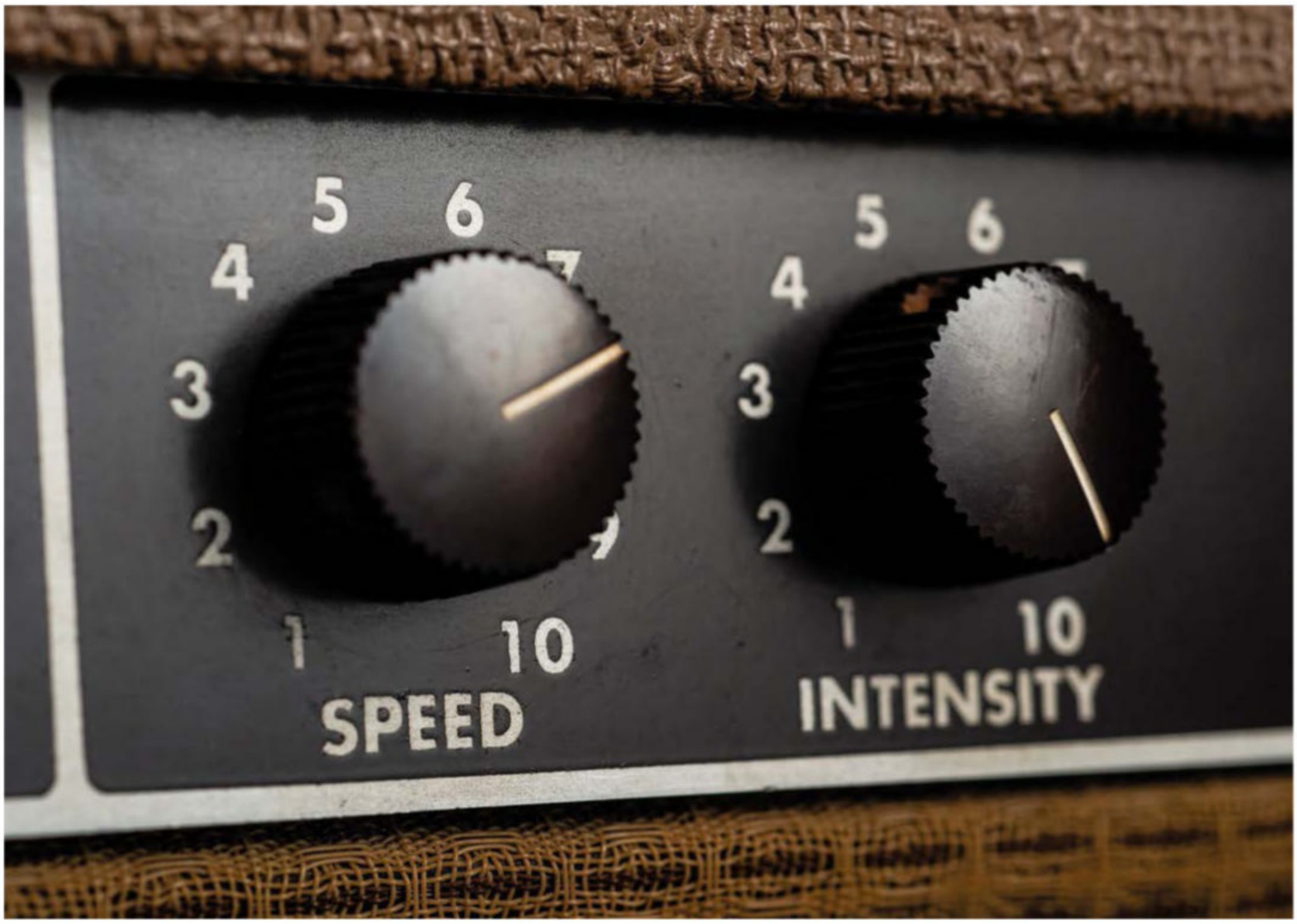
That gives you some leeway to set the volume, treble and overdrive, and subtly shape the midrange. The normal channel sounds identical but darker. While this isn't the most versatile amp, the core tone is so amazing that it hardly matters.

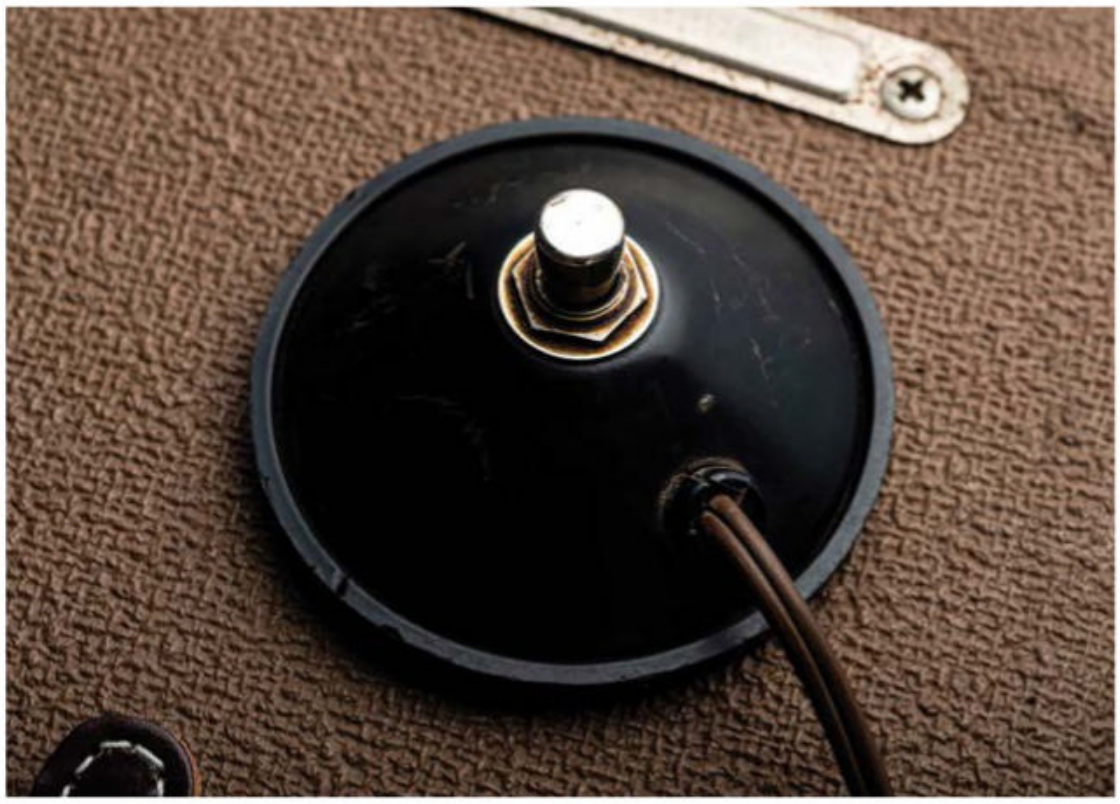
Moving onto the Deluxe Reverb, setting both channels identically reveals that extra treble doesn't necessarily equate to extra clarity. We find the normal channel has a fuller and more 'straight through' sort of tone with a naturally balanced quality but there isn't a world of difference.

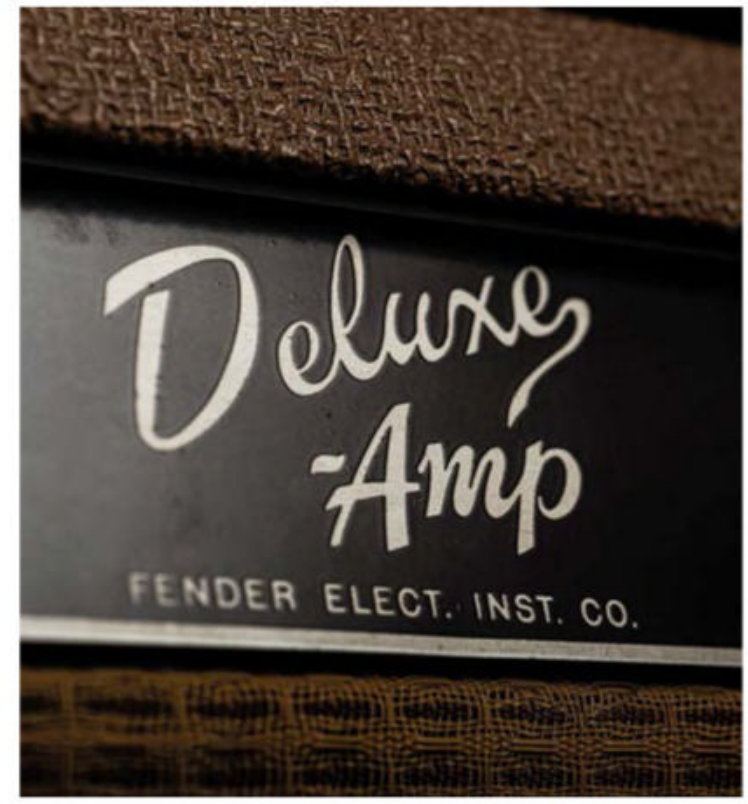
The vibrato channel sparkles and has a sweetness in the treble response that never becomes searing. With a Strat, it's an undeniably pretty combination and the reverb is huge, deep and three-dimensional. It also integrates seamlessly with the dry signal to create a wonderfully unified whole.

The tremolo features a choppy and fluttering quality with reasonably fast attack and decay times. Indeed, the tremolo circuit on this amp might need some attention because the effect cuts out before the speed achieves *Bang Bang* frequencies, and we might prefer the slower settings to be even slower.

But this isn't about swampy pulsations tugging on your heart strings. It's a classic effect – and, in combination with the reverb, one that's recognisable from countless recordings – but we prefer the voicing of the brown Deluxe's tremolo circuit overall.







With the Stratocaster, things remain reasonably clean all the way up to about seven on the volume control. Above that, the overdrive eases in and the sustain is enhanced but it never becomes 'heavy' as such, and we find ourselves in need of some stompbox assistance to push things into SRV territory. Plug in a Gibson with P-90s or humbuckers and it's a different story: you'll find a real sweet spot where compression and break-up enter the fray between four and five on the volume control.

The Deluxe Reverb offers versatile tone-shaping, refined sound quality, sweet overdrive, pedal-platform suitability and evocative onboard effects. It's a major milestone in the history of Fender amps and it's still tough to beat as a general-purpose guitar amplifier. In contrast, the 6G3 Deluxe is essentially a stepping stone between the tweed and black-panel eras – it's more roots than country and more Houston honk than Tennessee twang.

The Deluxe Reverb, then, is clearly the more sophisticated and iconic amp of the two. But if Fender had simply added spring reverb to the 6G3 and called time on Deluxe development, that would have been fine by us. G

TOP These cupcake knobs have a recessed marker and the numbers are printed onto the panel

ABOVE LEFT No footswitch labelling was necessary as it was only required for the onboard tremolo

ABOVE RIGHT The typography on brown Fenders is subtly different to later models

Electricity Meets Guitar

In this new series exploring the evolution of guitar effects, JHS Pedals founder and stompbox historian Josh Scott sets the scene for a most excellent adventure through guitar history

WORDS JOSH SCOTT

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If you really want to explore the history of the guitar, that begs the question: how far back do you want to go? I lean towards going too far. Always.

Should we go as far back as 500AD, when the first guitars (portable wooden stringed instruments with fretted necks and hollow bodies) appeared in artwork produced by the Hittites? Or should we travel back to 1311, when the coronation of Alfonso XI (the king of Castile, León, and Galicia) was celebrated by blasts of every instrument available at the time, including guitar? Should we make a stop in 1660, when the guitar was catapulted to the very summit of English society when the exiled King Charles II returned to England to take the throne, bringing with him a new wife and a love for the guitar imparted by the great Italian guitarist Francisco Corbetta?

We could. But then the name of this article is Electricity Meets Guitar. So let's start with a man, a key and a kite.

THE RIGHT KEY

In June 1752, when American Founding Father and inventor Benjamin Franklin flew his kite into a raging Pennsylvania storm cloud and pulled electrical sparks from the sky, he forever proved that lightning was in fact electricity, and furthered a new exploration of harnessing nature's most magical and mysterious force. He was working towards a rather personal reality for us here in the pages of *Guitar Magazine*, blazing a trail that almost 200 years later would transform an ancient wooden box with strings into a culture-shaking instrument of change. He was unknowingly helping to electrify our guitars. I like to think he would be proud of what he helped accomplish – and I like to think he'd have enjoyed the 1980s.

I know this talk of transforming an ancient box into an instrument of change sounds dramatic, perhaps even over the top. It should. The harnessing of electricity gave us the light bulb, radio, television, the electric motor, refrigeration, the Super Nintendo Entertainment System, air conditioning, electric can openers and many other technological marvels. But most importantly, it gave us the electric guitar.

In 1931, when George Beauchamp completed the first electrified guitar by winding thousands of wires around a magnetic pole to create a coil that turned the strings' vibrations into electrical energy, it was an awkward and misunderstood thing to behold. For starters, traditional guitar makers and musicians were too busy laughing at how it looked and ridiculing this new instrument to actually play it. At first glance, it was a failure.

One year later, on Halloween night of 1932, guitarist Gage Brewer played two different models of George's electrified guitars at the Shadowland Pavilion in Wichita, Kansas. This was the first-ever live performance of the newly electrified guitar.

Many were afraid of what they might witness and some even feared that the electricity in the guitar could kill or injure Brewer if things were to go wrong. After all, it had only been about 50 years since famed inventors Thomas Edison and Nikola Tesla's rivalry led to electric light first appearing in homes. At this point, many of the surrounding Kansas towns still didn't have electricity, and this was reflected across the entire nation – while Brewer was demonstrating the power of the electric guitar, 30 per cent of the US was still in the dark.

The advertisement for the event embraced the electric guitar's notoriety: "We are at this time introducing the world's newest and most sensational instrument. A new invention which is startling to the music world…" Halloween was the perfect night to debut the electric guitar in live performance, as it was equal parts exciting and frightening to the audience who had no idea what was happening in front of them or what it really meant to electrify a guitar.

POWER TO THE PEOPLE

With this same sentiment, let's ask the questions that the audience of 1932 was most likely asking. Why on earth would anyone want to electrify the guitar? What good would it do to capture the strings' vibrations and send them as electrical current into an amplified speaker? Was the natural sound of a Gibson acoustic not enough? Were the Martin dreadnought and the Epiphone archtop not satisfactory?
The short answer? No.

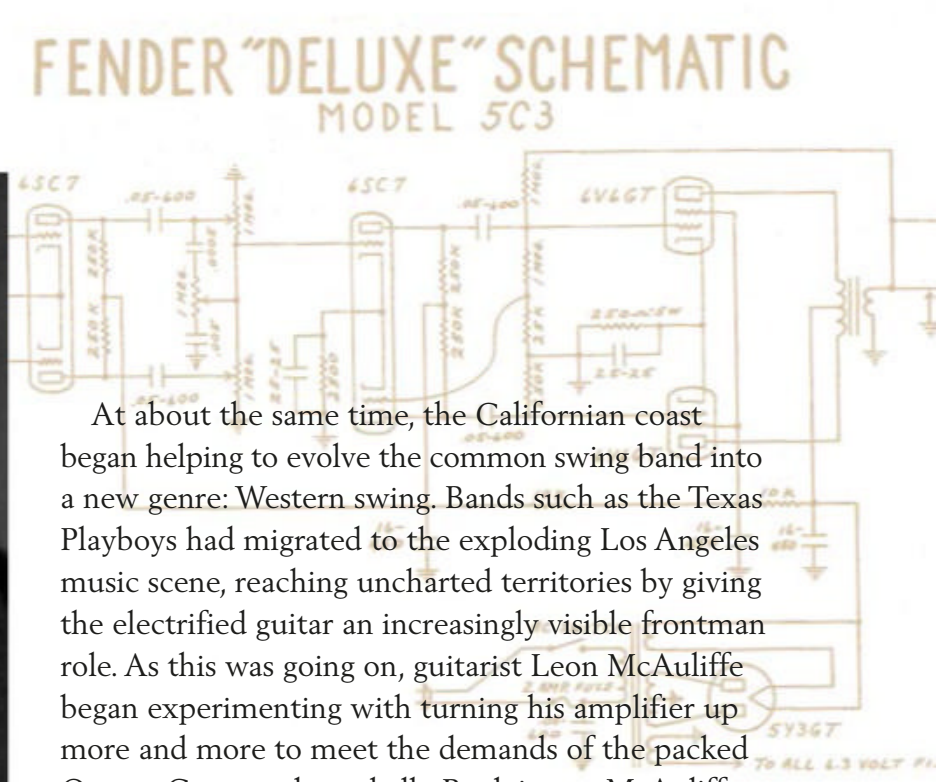
“WHEN I BUILD MY TIME MACHINE, MY FIRST DESTINATION WILL BE 1752. I PLAN TO BRING BENJAMIN FRANKLIN AN ELECTRIC GUITAR”

ABOVE Charlie Christian with his newfangled electric guitar alongside bandleader Benny Goodman in New York in the late 1930s

OPPOSITE TOP Josh Scott taking a well-earned break from working on time machine prototypes

Music moves at the pace of culture – or perhaps it’s better to say that culture moves at the pace of music. The roaring twenties had revealed a major issue: acoustically amplified guitar needed an update and it needed it now. Jazz and swing guitarists rehearsed and put in the same hours as their bandmates on trumpet, saxophone and drums but they were being lost in the mix. The acoustic guitar was simply not going to work for the demands of modern music. Imagine heading home from a gig and asking your sweetheart how you sounded only to be met with, “I couldn’t really hear you”. That’s not rock ’n’ roll. That’s depressing.

By 1936, Gibson had released a new electrified archtop jazz guitar, the Electric Spanish ES-150, just in time for Charlie Christian to exploit it. Mary Lou Williams discovered the young prodigy in a small roadside club and promptly told the Justin Bieber of the day, Benny Goodman, all about him. Goodman took Charlie on the road. Armed with this new one-pickup electrified instrument, jazz guitar was now properly amplified. The world had its first guitar hero and the guitar had its first hope of being more than a wooden box with strings. Electricity was moving fast in the big band world. The kite was finally in the sky.



At about the same time, the Californian coast began helping to evolve the common swing band into a new genre: Western swing. Bands such as the Texas Playboys had migrated to the exploding Los Angeles music scene, reaching uncharted territories by giving the electrified guitar an increasingly visible frontman role. As this was going on, guitarist Leon McAuliffe began experimenting with turning his amplifier up more and more to meet the demands of the packed Orange Country dance halls. By doing so, McAuliffe was pioneering a new sound, that of distortion.

Players such as McAuliffe were helping radio repairman Leo Fender envision new amplifiers that further expanded what was possible through the sound of the electric guitar. The resulting music – not just loud but beautifully distorted – would change the course of rock ’n’ roll history. The term ‘distortion’ had begun to shift; it no longer meant broken equipment or bad musicianship. It was fast becoming an aesthetic choice.

BREAKING UP

Since the invention of vacuum tube-based and audio electronic design in 1907, engineers had fought hard to create clean, pure and pristine amplified sounds. By 1951, Willie Kizart, Ike Turner’s guitarist, and producer Sam Phillips of Sun Studios, had joined others such as Howlin’ Wolf in discovering that breaking past the clean barrier intended for guitar amplification could result in magic. In transforming the safe and predictable sine waveform of the guitar into a destructive square wave, they created a new genre of music: rock ’n’ roll.

Between 1952 and 1958, the Fender Telecaster, Stratocaster and Jazzmaster all hit the market, as did the original Gibson Les Paul solidbody electric. During this tumultuous decade, inventors such as Paul Bigsby, Leo Fender and Les Paul engaged in the musical equivalent of the Space Race, each hoping to release new developments in electric guitar before the others. It was a furious and risky business pioneering the new sound of society. But thankfully the electric guitar revolution was more or less restricted to popular culture and not communist regimes.

In 1958, Link Wray released his hit instrumental song *Rumble*, which featured distortion and one of the first uses of powerchords. Believe it or not, it was banned from the radio for fear that it would incite riots. For the record, this song would inspire famed psychobilly artist Poison Ivy to play the guitar, so this might not be as unbelievable as it sounds.

That same year, Chuck Berry released his smash hit *Johnny B Goode*, recorded on a Gibson ES-350T. In doing so, he introduced a new kind of hero: a rock ’n’ roll folk hero. The song became so iconic that in 1977, when NASA sent the Voyager 1 and Voyager 2 into interstellar space – the first human-made objects to venture there – it was included among the 90 minutes of music meant to inform inquiring extraterrestrials about the depth and breadth of human culture. Try to imagine Marty McFly at the

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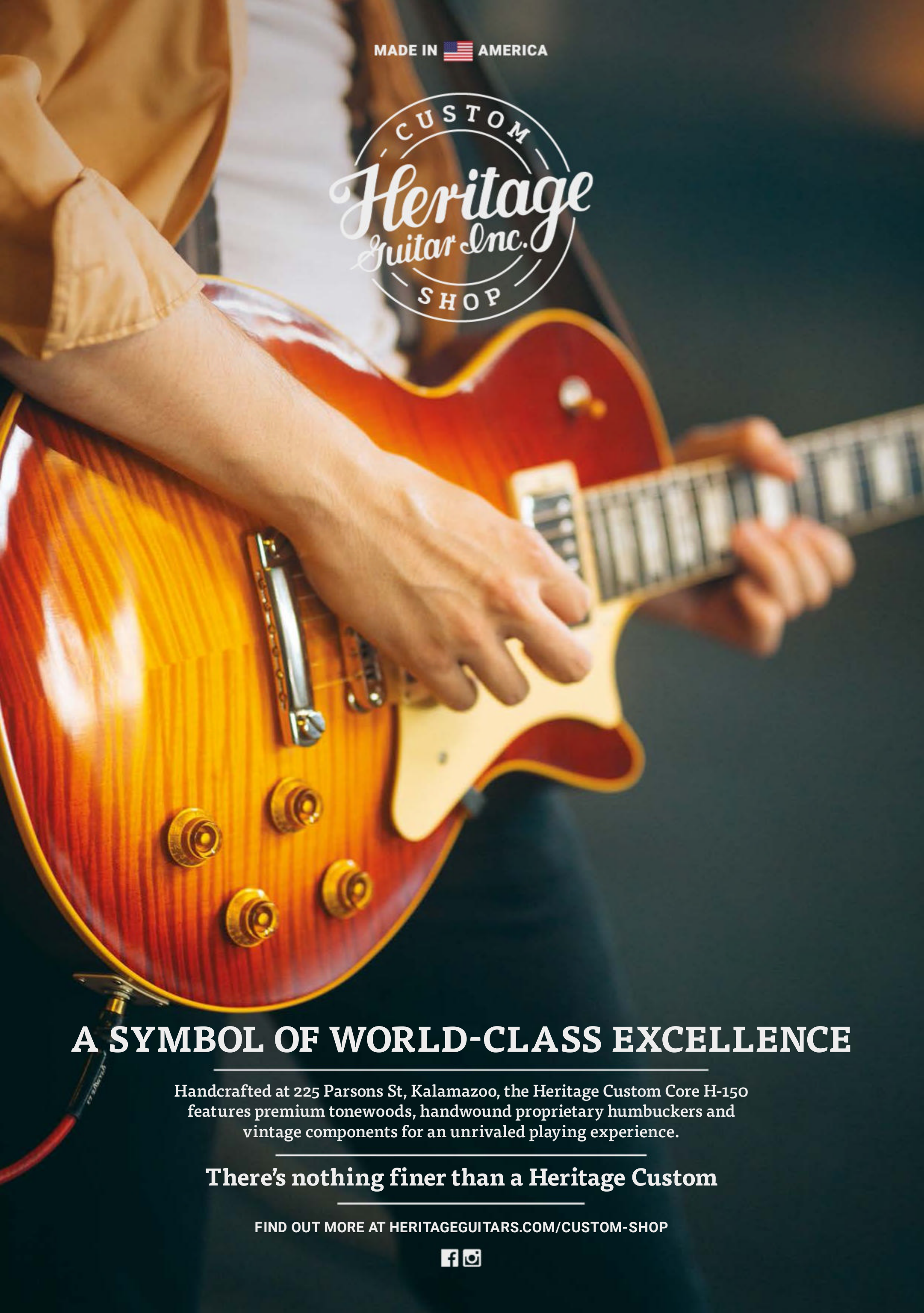
Enchantment Under the Sea Dance playing anything other than *Johnny B Goode*. You can't, can you? In the context of *Back To The Future*, time travel may be the reason that the electric guitar took off in the 1950s. But in reality, it was always going to happen. You can't stop the future.

FUTURE PERFECT

Can we confidently place George Beauchamp on the same pedestal as innovators like Thomas Edison and the Wright brothers? I say yes. Imagine the past century of history – from the Great Depression to World War II, and the Civil Rights movement to the Moon landing, not to mention the evolution of music into everything from dad-rock to death metal – without the electric guitar. Tough, isn't it? Picture Dylan at Newport without his Stratocaster or Jimi at Woodstock playing a Martin acoustic. It simply doesn't work. Imagine all the moments when the electric guitar, the sound of wire, magnets and metal strings, was the soundtrack to your life. Now, imagine those moments on an acoustic. Worse still, imagine them with a trombone or accordion. I don't know about you, but I just shuddered.

When I finally build my time machine, my first destination will be 1752. I plan to bring Benjamin Franklin an electric guitar, an armful of records, a nice stereo system and a generator (because it's going to be a few years until he's on the grid), so that I can inform him of what he accomplished. I want to crank that stereo and play Hendrix's *Are You Experienced*, Led Zeppelin's self-titled album, Pink Floyd's *The Dark Side Of The Moon* and U2's *The Joshua Tree*. I want to watch Ben's face as he realizes that the lightning he harnessed did more than illuminate our homes: it gave the guitar a voice and changed history. G

Visit thejhsshow.com for more effects adventures with Josh Scott and follow @jhspedals on Instagram



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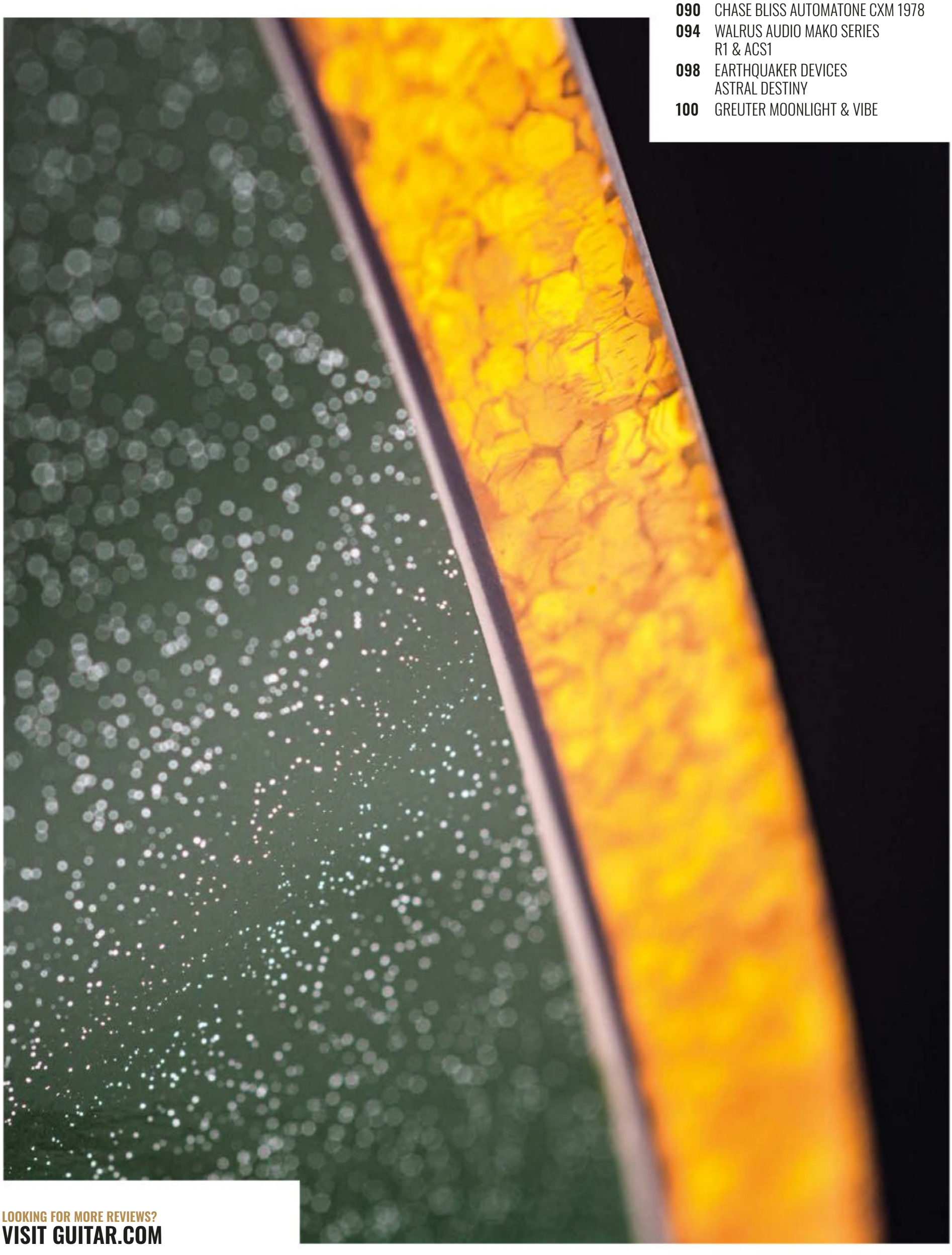

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Push comes to shove: push/push tone controls unlock single-coil sounds without major volume loss

FENDER
AMERICAN PROFESSIONAL II TELECASTER DELUXE

Guitar EDITOR'S CHOICE

WORDS CHRIS VINNICOMBE

An instrument from a controversial period in Fender's history gets a modern-day makeover – and we can't get enough of it

Fender's updated American Professional instruments were unveiled with a social media fanfare in late 2020 and we were hugely impressed with the standard Strat and Tele models. A general vibe of refinement means that everything about these guitars feels optimised and dialled in – from the rolled fingerboard edges and sculpted neck heel to the superbly voiced electronics. The latest Am Pro II model on our test bench is the Telecaster Deluxe – and it might just be the best of the bunch.

Showcased here in silverburst-style Mercury – just one of a range of striking finishes designed to pop on Instagram as effectively as custom colours did on the new colour television sets of the 1960s – the American Professional II Telecaster Deluxe naturally bears something of an aesthetic resemblance to the Tele Deluxe of 1972. But if you want the sounds and specifications of the 1970s, you'll have to look elsewhere.

Fender recently recreated the Seth Lover-designed Wide Range pickups with CuNiFe magnets for its American Original reissues. The pickups in our review guitar look similar but are actually V-Mod II Double Tap units, sized like regular PAF-style humbuckers and wired here with single-coil voices available via individual push/push tone controls.

The maple neck is a four-screw affair finished in Fender's 'Super-Natural' satin and it boasts 22 narrow-tall frets, a rosewood 'board, headstock-end truss-rod access and Micro-Tilt neck angle adjustment. The Tele Deluxe features a chopped-down bridge but, like the full-size bridge of its more traditionally configured Am Pro II Telecaster stablemate, the trio of brass barrel saddles are intonation-compensated and you can string through the body, top load or combine both for optimal feel. The outer saddles don't have domed ends but palm-protection is provided by the raised sides of the bridge plate.

IN USE

The ergonomic improvements common across the American Professional II range are accompanied here by a generous ribcage contour, which has always been a feature of the Telecaster Deluxe design and helps lend the model a more svelte feel than a slab-bodied Tele, especially when seated. That said, we've owned a few early 1970s Fenders over the years and, while the good ones aren't the ungainly boat anchors that they are so often made out to be, they certainly don't offer anywhere near as smooth a ride as this.

One of the attributes of a great guitar is that it simply gets out of the way and lets you get on with the business of making music.

Voice of reason: the V-Mod II Double Tap humbuckers facilitate exploration

Top brass: three compensated barrel saddles combat intonation woes

The Deluxe is comfortable and compact, with the neck profile providing the right blend of substance and support without pushing you in any particular stylistic direction and, when you plug in, it's the same story with the pickups.

The space between archetypal Fender single-coil and Gibson humbucking flavours proves here to be far from bland. It's a Tele that's freeing to spend time with; you don't immediately relax into familiar tropes and there's a freshness that inspires you to explore and compose rather than simply noodle.

Whether used in full humbucker or single-coil mode – or a blend of both in the middle setting – all over the fretboard you'll find alluring combinations of depth and clarity, honk and spank, woodiness and upper-harmonic sheen. In this chassis and with this wiring configuration, the V-Mod II Double Tap pickups have almost unbridled potential and it's easy to imagine this guitar becoming someone's number-one electric. If Fender ever releases a version with a vibrato, there's a good chance it will become a go-to guitar for us too.

KEY FEATURES

PRICE £1,699 (inc hard case)
DESCRIPTION 6-string singlecut solidbody electric, made in the USA
BUILD Alder body with gloss urethane finish, maple neck with 'Super-Natural' satin urethane finish and gloss headstock face, 9.5" radius rosewood fingerboard with 22 narrow-tall frets, bone nut
HARDWARE Custom 'cut-off' vintage-style bridge with 3x compensated brass saddles, Fender Standard cast/sealed staggered tuners
ELECTRONICS 2x V-Mod II Double Tap humbuckers, 2x volume, 2x tone (push/push coil split), 3-way toggle pickup selector, treble bleed circuit
SCALE LENGTH 25.5"/648mm
NECK WIDTH 43mm at nut, 51.6mm at 12th fret
NECK DEPTH 20.9mm at first fret, 23.2mm at 12th fret
STRING SPACING 35.3mm at nut, 54.3mm at bridge
WEIGHT 3.58kg/7.9lb
LEFT HANDERS No, American Professional II Telecaster only
FINISHES Mercury (as reviewed), Dark Night, 3-Colour Sunburst (all rosewood 'board), Miami Blue, Mystic Surf Green, Olympic White (all maple 'board)
CONTACT fender.com

9/10 **In an impressive range, this is the most inspiring new model so far**

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HARMONY
STANDARD SERIES COMET

WORDS RICHARD PURVIS

Guitar EDITOR'S CHOICE

The new generation of Harmony solidbodies is dripping with modern retro charm, but can this compact semi take on the biggest stars?

The rebirth of Harmony – one of the great 'minor league' guitar brands of the 1950s and 60s and once the USA's largest musical instrument manufacturer – was announced little more than three years ago. The idea for these new guitars, built in Kalamazoo, Michigan, was to combine the pawnshop charm of the originals with the solid playability of modern American build quality.

So far the Standard Series has lived up to that promise but now it's time to crank things up a notch with the first semi-hollow guitar of the new Harmony era. This is the Comet, based on the H72 model of the late 1960s.

It's a small guitar, something like a Gibson ES-339 in its body dimensions, and it really is quite the cutie. What it doesn't have is an awful lot in common with the instrument that inspired it, which, considering the cheap and cheerful reputation that this catalogue brand used to have, might be just as well.

The basic double-cut outline is true to the template, as is the six-in-line headstock. But unlike the fully hollow H72, the Comet has a solid centre block, as well as a set neck instead of the original's bolt-on construction. The hardware has also been upgraded: the tuners are locking types, as on the new Harmony solidbodies, and at the other end we find a tune-o-matic bridge and stop tailpiece. Tragically, there's no Bigsby option – yet.

All of this is taking us very much in the direction of the ES-339 recipe but there are key differences. The most interesting is the timber. There's no maple at all in this guitar: the top, back, centre block and neck are all mahogany, with an ebony fingerboard. It's also worth noting that the top is carved, not pressed like the usual maple laminates.

Harmony describes these pickups as 'custom gold foil humbuckers' and there's not much more we can tell you than that because it's all top-secret. They wouldn't even tell us what the magnets are made of. What we do know is that they're designed to recreate the clarity and touch dynamics of the original DeArmond single-coil gold foils but using modern techniques and parts – and twin coils.

The 'cupcake' volume and tone controls of the other Standard Series models are present here, thank goodness, alongside a strangely tall pickup switch; Peter Green fans take note, you can pull up the volume knob to knock the pickups out of phase in the middle position.

This being a semi rather than a solid, there's a different feel to the choice of finishes available: no Champagne or Pearl White here, just classic Sunburst, Trans Red or the gently sparkling Midnight Blue of our review sample. We won't judge you if you don't think blue is the prettiest option. But you'd be wrong. Because it is.

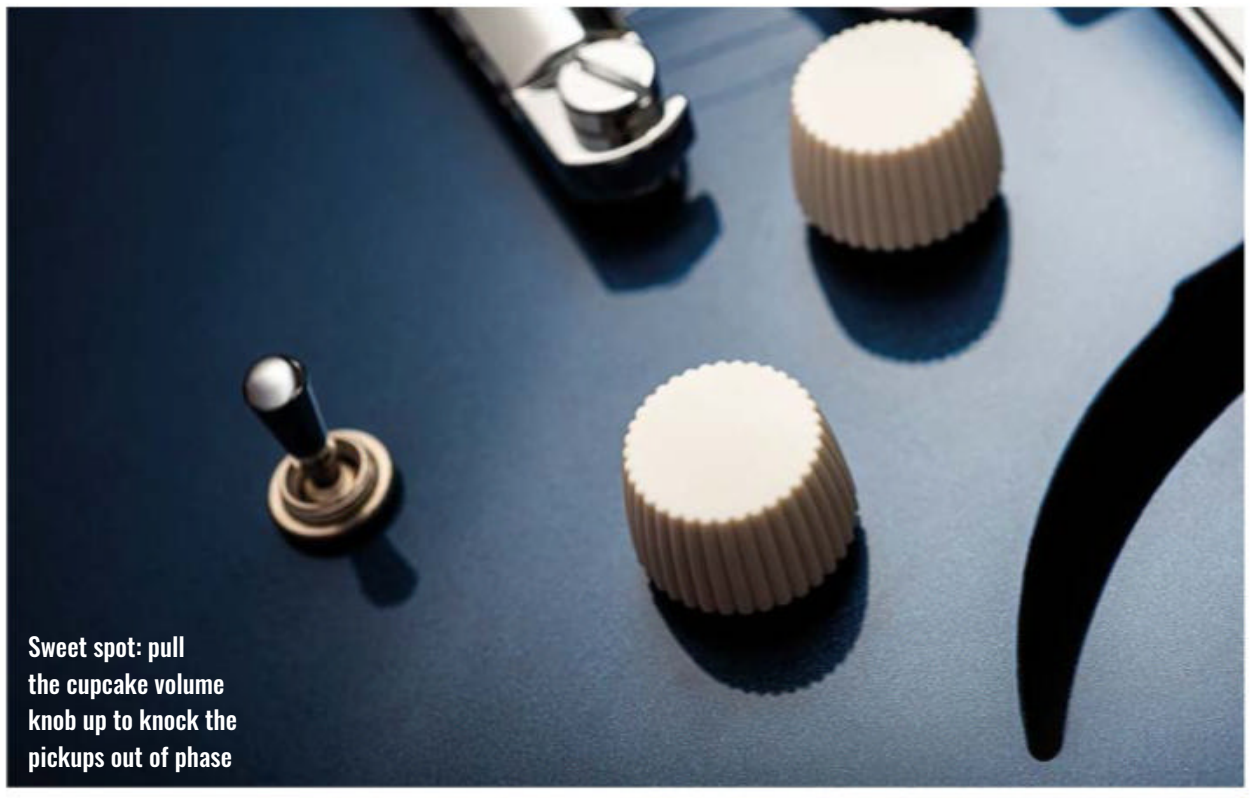
Before we tuck in, full disclosure: Harmony is owned by BandLab Technologies, as is *Guitar Magazine*. But if you think that's going to influence this review, you're wrong and we're very disappointed in you.

Secret sauce: Harmony is secretive about the recipe but these gold foil humbuckers sound glorious

IN USE

This is the kind of guitar you pull out of the case and wonder for a moment what happened to the rest of it. At well under 3kg, it's not going to exacerbate anyone's back problems, and the diddy dimensions mean smaller players should find it much less unwieldy than the average thinline semi. Given that so many of us are doing most of our playing in a seated position at the moment, the arrival of a semi-hollow instrument with such snug proportions couldn't be better timed.

How's Harmony's quality control? It's pretty good, although a microscopic inspection reveals some minor binding flaws at the neck join and, as we peer inside the upper f-hole, a small cascade of squeezed-out glue on the side of the centre block.



Sweet spot: pull the cupcake volume knob up to knock the pickups out of phase

Refine and dandy: like Harmony's new solidbodies, the Comet boasts locking tuners

KEY FEATURES

PRICE £1,499 (inc Mono Vertigo gigbag)
DESCRIPTION Thinline semi-hollow electric guitar, made in the USA
BUILD Bound mahogany top and back, mahogany centre block, set mahogany neck, 12" radius ebony fingerboard with 22 medium-jumbo frets and bone nut
HARDWARE Locking tuners, tune-o-matic bridge and stop tailpiece
ELECTRICS 2x custom gold foil humbuckers, master volume and tone, three-way switch, push/pull phase switch in volume control, orange drop capacitor
SCALE LENGTH 25"/635mm
NECK WIDTH 42.7mm at nut, 51.3mm at 12th fret
NECK DEPTH 20.1mm at first fret, 23.7mm at 12th fret
STRING SPACING 35mm at nut, 51mm at bridge
WEIGHT 2.7kg/6lb
FINISH Midnight Blue (as reviewed), Sunburst or Trans Red nitrocellulose
LEFT-HANDERS No
CONTACT harmony.co, andertons.co.uk

Our review guitar's factory setup isn't technically perfect in the sense that there's zero neck relief but thankfully that doesn't have any noticeable effect on playability. The un-rolled fretboard edges, however, give a somewhat austere feel to the guitar's otherwise welcomingly middle-of-the-road neck profile.

In terms of sound, there are no real surprises in the first acoustic strum: it's got something of the loud banjo-like midrange common to most semi-hollow guitars but the all-mahogany build ensures there's plenty of warmth in there too.

Plugging into a clean amp and flipping to the neck pickup, the word that leaps to mind is inevitably 'jazz'. There's a punchy purity to each note that rewards lyrical noodling – and isn't compromised by softening the top end with a twist of the tone control. Nice.

A whiff of overdrive is all we need to ditch that smoky jazz club for the even smokier blues bar across the street, and this is arguably the Comet's strongest suit. It's mellow but not muffled, snapping back with real vigour when you dig in. The middle pickup setting adds the expected clucky complexity but the treble response remains gentle rather than jangly.

And then we put the pickups out of phase for some good old-fashioned quack. This is not a Gibson Les Paul but the essential character of that early Fleetwood Mac lead sound is right there and we've a feeling that Greeny himself – whose first electric guitar was a Harmony Meteor, by the way – would have approved.

The bridge pickup doesn't let us down either, upping the spank factor considerably while retaining enough fullness so that switching mid-solo allows you to explore four very different variants of the same fundamentally sweet tone. This is a guitar that will make you play the blues even if you don't want to – but you'll thank it afterwards.

Heavy distortion isn't really where the Comet's at – as we may have mentioned, this is not a Les Paul, and there's too much middly stuff swirling around for neatly clipped powerchords or articulate shredding. But for anything in the low-to-medium gain zone, it's really rather seductive.

The key to this guitar seems to be the tension between its build, which leans towards mellowness, and its pickups, which pull in the opposite direction. The result is a characterful instrument that's quite possibly our favourite new Harmony model yet. G

9/10 **A cute little semi that packs a quartet of very likeable tones indeed**

LIKE THIS? TRY THESE...

Gibson ES-339 **£2,049**
B&G Guitars Little Sister Crossroads **£1,335**
Gordon Smith GS Deluxe Semi-Solid **£1,299**

Bigsby

EPIPHONE
EMPEROR SWINGSTER

WORDS HUW PRICE

As this ornate hollowbody with rockabilly stylings makes its return for 2021, can it convince Gretsch fans to jump ship?

Epiphone first introduced the Emperor model way back in 1935 to compete with the Gibson Super 400 but this Swingster iteration is geared up for rockabilly rather than jazz and has its sights set squarely on Gretsch fans.

The Swingster's handsome Forest Green Metallic paint and gold hardware is a classic combination that recalls the Cadillac Green Gretsch Country Club, while the gold sparkle binding screams Falcon. Throw in the pickup covers Chet Atkins-style Bigsby arm and the vibe is undeniable. But that's where the resemblance ends, because the body and headstock shapes, the floral headstock inlay, the block markers and the pickguard motif are all quintessential Epiphone.

The Swingster is a true hollowbody guitar made from laminated maple, with a set mahogany neck and no centre-block or trestle bracing. Indian laurel is a perfectly acceptable fretboard substitute for rosewood but this is probably the first time that we've seen it with quite such attractive figuring. It's shaped to a peak at the end, much like some of Gibson's high-end archtops and acoustics, and has sparkle binding with multi-ply purfling to match the body. The neck also features a two-way truss rod.

Hardware includes a LockTone tune-o-matic bridge on a pinned wooden base and Grover Rotomatic tuners, while the familiar-looking control array features a potential ace up its sleeve in the form of series/parallel switching via push/pull tone pots.

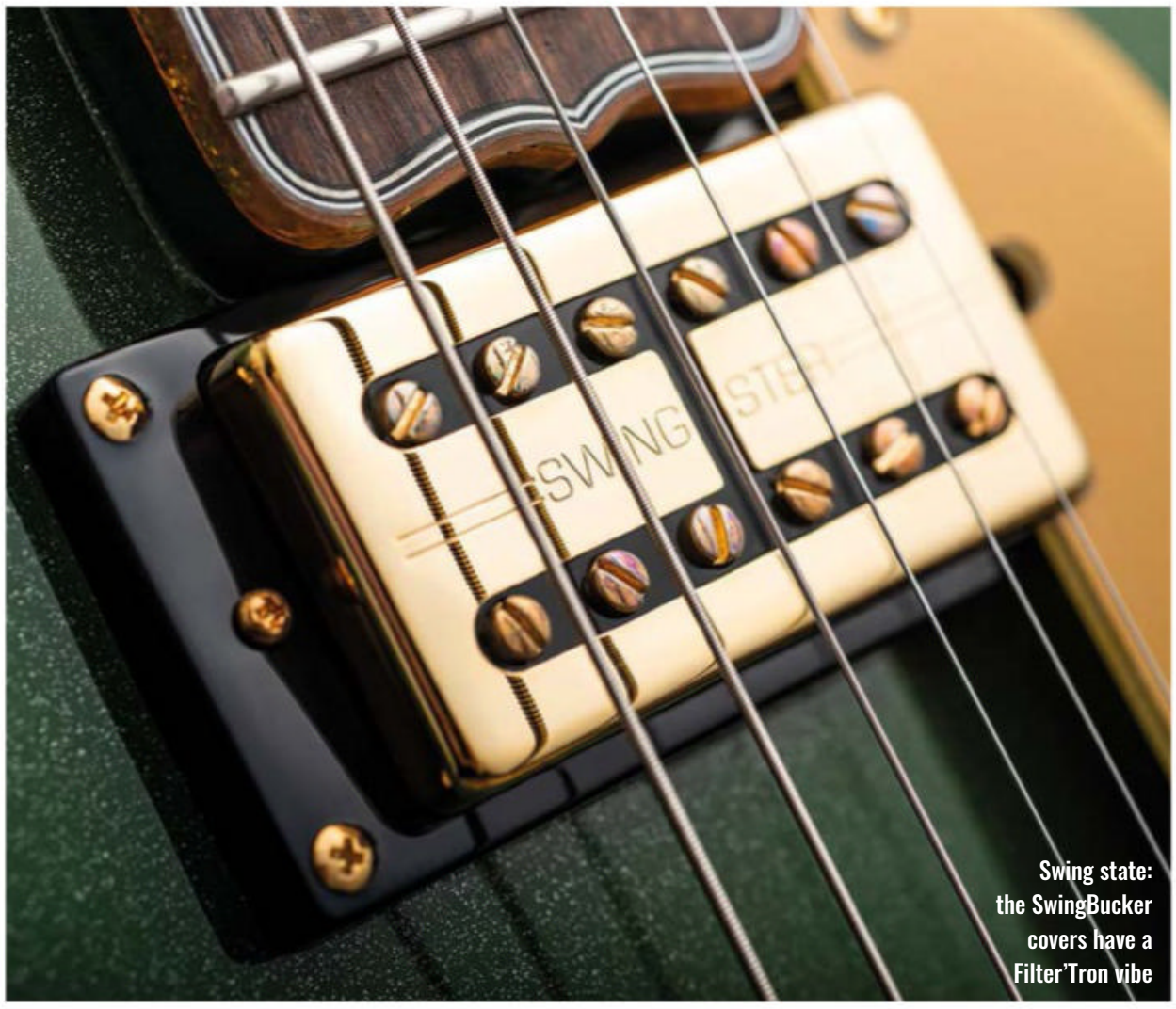
IN USE

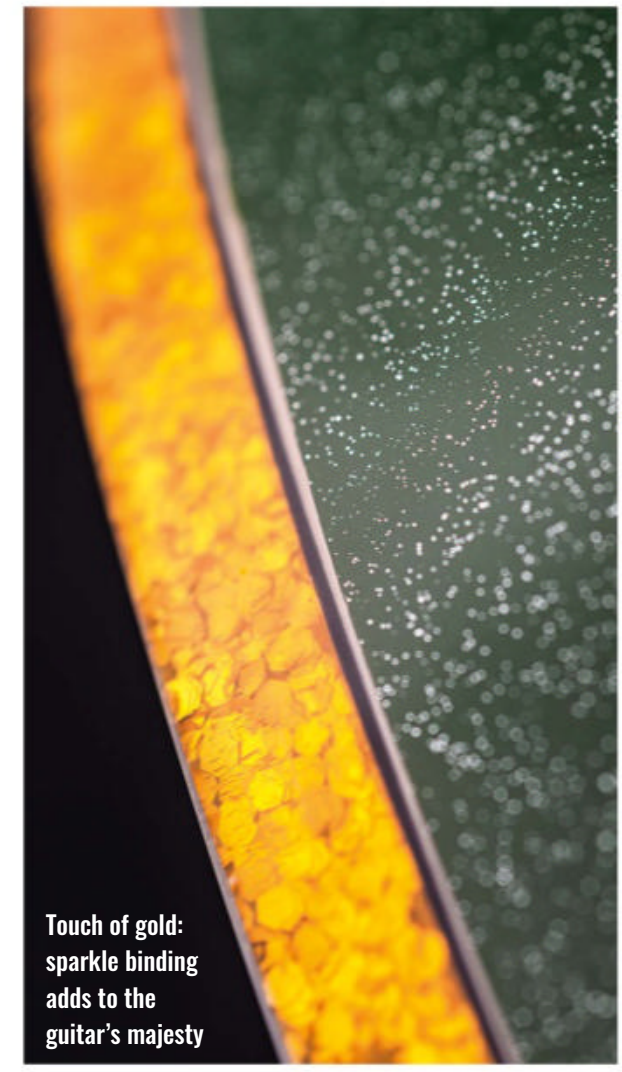
It's not entirely clear why Epiphone describes this neck profile as a 'SlimTaper' but we're not complaining. It's actually fairly deep and rounded but very comfortable indeed. The wire Bigsby arm is curved for comfort too and its angle and position are a revelation because it fits our picking hand perfectly. If you've only used flat Bigsby arms, you should try an arm like this – just ensure that the two set screws securing it in place are tight or you may find that it starts to rotate during use.

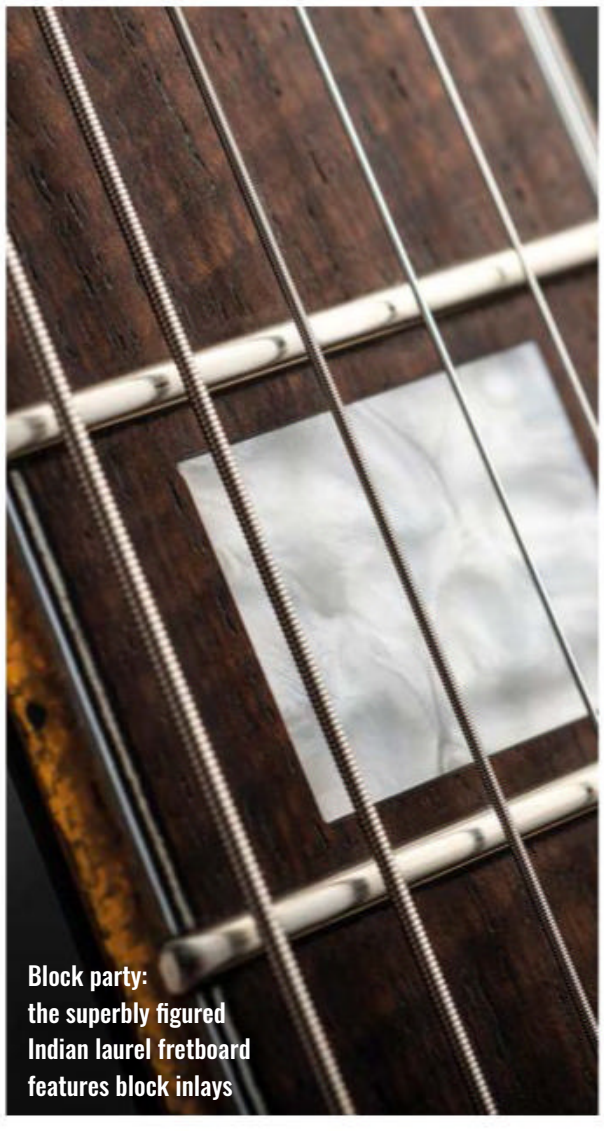
The Swingster's unplugged performance is good enough for it to serve as a medium-volume acoustic archtop. The tone is full, balanced and punchy in the low mids, with mellow but clear treble and smooth sustain.

Plugged in, with the volume controls in their push positions, the pickups default to parallel mode. It's a clear, low-output tone that works well enough across all three settings but lacks a little character, and there's noticeable treble loss when the volume controls are turned down.

KEY FEATURES

PRICE £699 (inc hard case)
DESCRIPTION Hollowbody archtop electric guitar, made in Indonesia
BUILD Laminated maple body with set mahogany neck, laurel fretboard with 12" radius, gold sparkle binding with multi-ply purfling, 20 medium-jumbo frets, Graph Tech NuBone nut
HARDWARE LockTone tune-o-matic bridge, licensed Bigsby tailpiece with 'wire' arm, Grover Rotomatic tuners
ELECTRONICS 2x SwingBucker humbucking pickups, 2x volume, 2x tone (push/pull for series/parallel), 3-way toggle pickup selector
SCALE LENGTH 24.7"/628mm
NECK WIDTH 43.2mm at nut, 55.1mm at 12th fret
NECK DEPTH 21.9mm at first fret, 23.7mm at 9th fret
STRING SPACING 35mm at nut, 52.1mm at bridge
WEIGHT 3.45kg/7.6lb
LEFT HANDERS No
FINISH Forest Green Metallic (as reviewed), Black Aged Gloss and Delta Blue Metallic with nickel hardware
CONTACT epiphone.com

Swing state: the SwingBucker covers have a Filter'Tron vibe


Touch of gold: sparkle binding adds to the guitar's majesty


Block party: the superbly figured Indian laurel fretboard features block inlays

Down to the wire: the Bigsby tailpiece is a licensed unit with a Chet-style wire arm

Pulling up the tone controls switches the pickups into series mode, which offers a significant hike in volume. The tone is fuller, more powerful and a bit more fun, but neither mode quite does justice to the Swingster's unplugged potential. The best setting is in the middle with the bridge in series and the neck in parallel – just don't expect the twang or throaty chime of a genuine set of Filter'Trons from these SwingBucker units.

We've been seriously impressed by the pickups in Epiphone's Inspired By Gibson models and would happily trade the trick wiring of the Swingster for a pair of those. However, with the exception of the failing adhesive on the pickguard's E logo, the sheer standard of finishing and detailing on display here is a step above that range. This guitar looks and feels classy, the fretwork is outstanding and it's just a pickup upgrade away from being one of the best single-cutaway archtops available at this price point. G

8/10 **The pickups don't deliver on its aesthetic promise but this is a superbly made and great-playing electric archtop**

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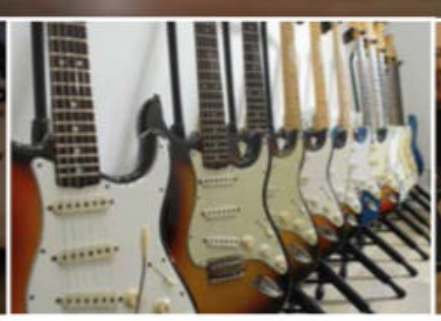

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CORT

X700 DUALITY & KX300 ETCHED

WORDS DARRAN CHARLES

In addition to building guitars for many other brands, Cort continues to provide its rivals with fierce competition thanks to a well-appointed range of in-house designs

Based in Seoul but boasting facilities in China and Indonesia, the Cor-Tek Corporation, aka Cort Guitars, is one of the world's largest instrument manufacturers. Though contracted to build instruments for the likes of Ibanez, G&L and Squier, in recent years Cort's own-brand models have become much more varied and far less derivative, offering viable alternatives to the many bigger-name guitars that roll off its production lines.

Cort's X series was conceived to create guitars "built for metal but versatile enough to cover an extremely wide range of musical genres". Of the eight models in the range, the X700 Duality is one of the most arresting, with a flame maple and swamp ash body finished in Antique Violin Burst and incorporating a striking Knaggs-style natural outline.

The eye-catching stylings continue through to the three-piece neck, which consists of a maple centre and panga panga side sections. The latter is a close relative of wenge, with a rich dark-chocolate hue. The carve is a very comfortable D shape, with seductive shoulders providing extra support. The two-octave ebony fretboard's thin protective coat lends it an unfinished feel and, when played unplugged, it offers a bright and snappy acoustic tone. And even on the darkest stages you'll be able to keep your bearings thanks to those fluorescent Luminlay side dots.

The X700 Duality is a rather weighty beast but any fears of shoulder fatigue are assuaged by even weight distribution when it's strapped on. The body contours are not quite as pronounced as those of some other sporty S-types but the guitar's comparatively shallow forearm chamfer still provides comfortable support for our picking hand. For whammy abusers, the addition of a vibrato cavity provides ample uplift, and the rubber insert will ensure that even the most frantic gymnastics shouldn't damage the wood beneath.

If the X700 Duality's unique appearance isn't quite sinister enough for you, then the KX300 Etched will surely do the trick. The unusual Etched Black Gold finish is a sand-blasted open pore affair with a gold colour accent in the pronounced grain pattern of the swamp ash top. It has quite an industrial look but we're not sure the stark white binding complements it as well as black binding might have.

Despite its coarse appearance, the finish provides a pleasant resting surface for bare forearms and, whether sitting or standing, the KX300 Etched balances perfectly well. Despite the combination of a swamp ash top and mahogany back, it's significantly lighter than the X700 Duality. Other differences include the KX300's simpler maple/pau ferro neck construction and a string-through-body hardtail bridge rather than a vibrato.

IN USE

On board the Duality are the omnipresent Seymour Duncan TB-4 and SH-2N. As expected, when plugging into a cranked Mesa Express 5:50, the TB-4 at the bridge delivers a punchy mid-rich rock tone, with the ash and ebony adding brilliance. The neck pickup is thick and creamy enough for lead lines but offers enough vintage twang for rhythm work too. Boutique pickups may be all the rage but, for our money, there are few combinations that work better for heavy rock than this.

Positions two and four (the outer and inner coils of each humbucker, respectively) yield percussive and funky single-coil sounds, which will be go-to positions for fans of

Brand moves: the X700's Seymour Duncan pickups are a reassuring presence

artists such as Polyphia and Unprocessed. There's enough output for gain-hungry techniques, and enough snap and bite for funky rhythm work too.

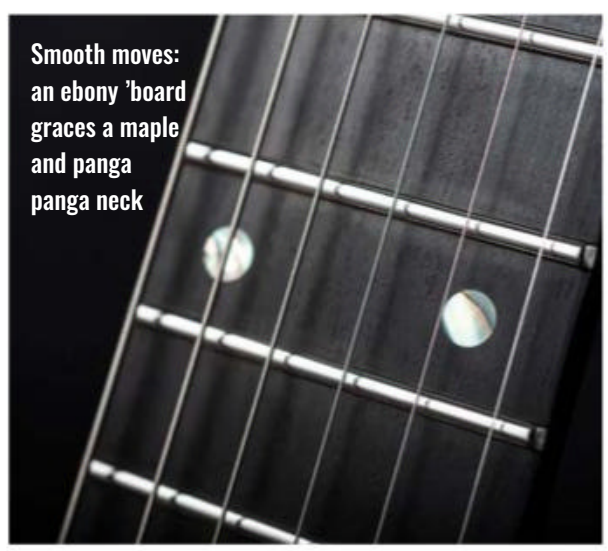
Unplugging the Duality proves to be far more difficult than we imagined and closer inspection reveals a locking output jack that ensures the cable remains in place. The release button means it's a two-handed task that may catch you out when swapping guitars between songs,but it could prove indispensable if you are prone to stepping on cables. Or it might just trip you up.

Had it not been for the battery compartment situated at the rear, we may have remained blissfully unaware of the active nature of the KX300's open-coil pickups. The EMG RetroActive Super 77 units are inspired by the rock tones of the 1970s but fall somewhere between old-school rock and modern metal territory, with the bridge providing enough output to deliver strident metal tones but not so much that a dynamic picking hand approach goes unrewarded.

While they don't possess the high output of classic EMG neck and bridge combinations, the Super 77s are still able to push our cranked Mesa Express into rich saturation, and the pronounced treble of the swamp ash top helps the KX300 provide an aggressive edge that works especially well for fast picking passages.

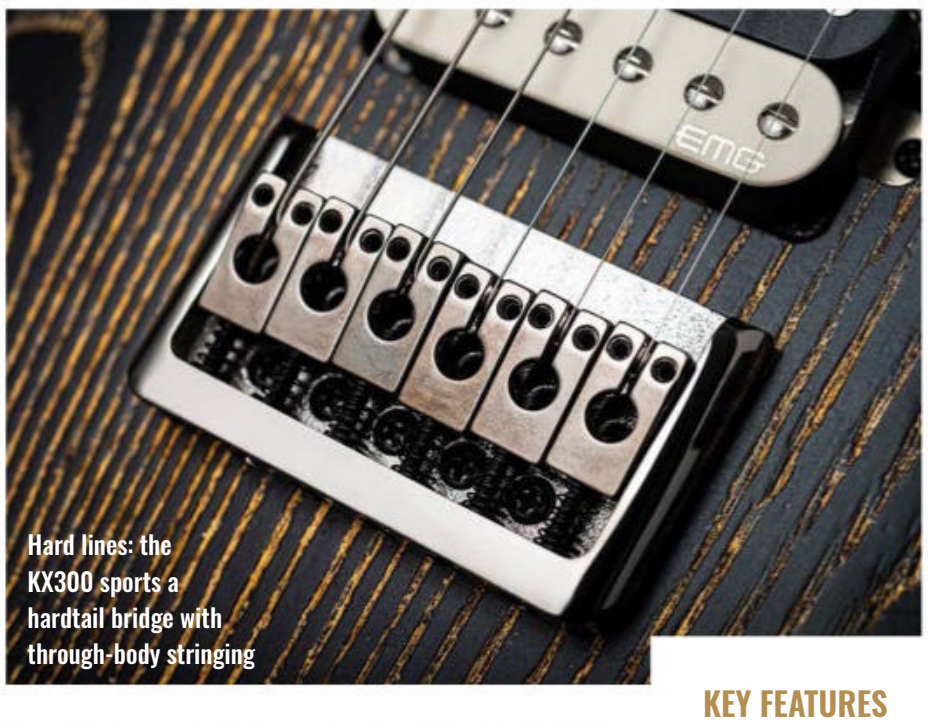
Though their finishes will polarise opinion, when it comes to sound and playability, both of these instruments hit the target. The X700's versatility is impressive, as it not only delivers sumptuous rock textures but is also capable of the powerful single-coil tones that are very much in vogue at the moment.

Lock and load: the Neutrik locking jack socket should prevent slip-ups

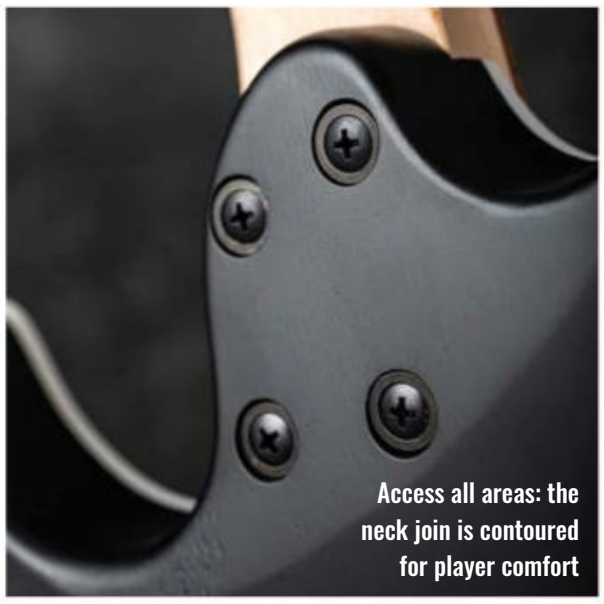


Smooth moves: an ebony 'board graces a maple and panga panga neck

EMG thang: the KX300's open-coil pickups are active but deliver organic tones



Hard lines: the KX300 sports a hardtail bridge with through-body stringing



Access all areas: the neck join is contoured for player comfort

While it might be true that the KX300 Etched is a more one-dimensional affair, that's not to say that it's suited solely to extreme saturation. Although the guitar's dynamically responsive Super 77 pickups excel with distortion, they are equally as characterful through more vintage-voiced overdrives. Were you looking to purchase these pickups alone to upgrade an existing guitar, it would cost you about £170 for a set, so it's particularly impressive to see them appear on an instrument at the KX300's bargain price point.

KEY FEATURES

CORT X700 DUALITY
PRICE £899 (inc soft case)
DESCRIPTION 6-string electric guitar, made in Indonesia
BUILD Flame maple top, swamp ash back, bolt-on three-piece maple and panga panga neck with 15.75"/400mm radius ebony fingerboard, 24 stainless-steel jumbo frets, Luminlay side dots
HARDWARE Chrome CFA-III vibrato bridge, staggered locking tuners
ELECTRONICS Seymour Duncan TB-4 (bridge) and SH-2N (neck) humbuckers, 5-way pickup selector, volume and tone controls, locking output jack
SCALE LENGTH 25.5"/648mm
NECK WIDTH 43mm at nut, 52.6mm at 12th fret
NECK DEPTH 19.3mm at 1st fret, 23.5mm at 12th fret
STRING SPACING 52.6mm at bridge, 36.4mm at nut
WEIGHT 3.9kg/8.59lb
LEFT-HANDERS No
FINISHES Antique Violin Burst (as reviewed), Light Blue Burst
CONTACT cortguitars.com

8/10 **A versatile rock guitar that has broad tonal appeal for modern-day shredders**

LIKE THIS? TRY THESE...

Schecter Reaper-6 Sky Burst **£689**
Ibanez RG1120PBZ Premium **£1,199**
PRS SE Custom 24 **£799**

Guitar EDITOR'S CHOICE

KEY FEATURES

CORT KX300 ETCHED
PRICE £499
DESCRIPTION 6-string electric guitar, made in Indonesia
BUILD Swamp ash top, mahogany back, bolt-on Canadian hard-maple neck with 15.75"/400mm radius pau ferro fingerboard, 24 jumbo frets
HARDWARE Black nickel hardtail string-through-body bridge, die-cast tuners
ELECTRONICS 2x EMG RetroActive Super 77 humbuckers, 3-way toggle pickup selector, volume and tone controls
SCALE LENGTH 25.5"/648mm
NECK WIDTH 42.8mm at nut, 51.9mm at 12th fret
NECK DEPTH 21.1mm at 1st fret, 21.8mm at 12th fret
STRING SPACING 52.9mm at bridge, 35.9mm at nut
WEIGHT 3.5kg/7.72lb
LEFT-HANDERS No
FINISHES Etched Black Gold (as reviewed), Etched Black Red

9/10 **A metal machine both in appearance and sound at an impressively low price**

LIKE THIS? TRY THESE...

Jackson Pro Series Dinky DK2 Ash **£1,049**
Charvel Pro-mod San Dimas Style 1 **£1,049**
Harley Benton Amarok-6 **£366**

CHASE BLISS AUDIO

AUTOMATONE CXM 1978

WORDS ED OLESZKO

Is this achingly hip reverb unit with flying faders an extravagant gimmick or the must-have stompbox of 2021?

Guitar EDITOR'S CHOICE

Chase Bliss Audio has been operating at the bleeding edge of effects pedal innovation in recent years, and 2020 saw the release of perhaps its most ambitious and striking unit to date, the Preamp MKII. A collaboration between Chase Bliss and Benson Amps, the debut Automatone pedal blended the DNA of the Benson Preamp with fuzz, resonant parametric mids from the now-discontinued Chase Bliss Condor, programmability, MIDI control, and motorised faders that move automatically as you cycle through presets. For the second Automatone unit, Chase Bliss has attempted something even more impressive and teamed up with Meris for the CXM 1978, a "modern take on vintage studio reverb."

Why 1978? This was the year the legendary Lexicon 224 arrived on the scene. Conceived as a space-saving alternative to the analogue plate, chamber and spring reverbs of the past, the 224 wasn't the first digital reverb unit but it was the most popular with the pros, soon featuring on countless hit records and remaining a studio staple to this day.

Though the heart of the Lexicon 224 is a large rack unit, its LARC controller is a white wedge-shaped remote-control box equipped with six faders. Sound familiar?

Space station: the CXM 1978 boasts room, plate and hall reverbs with countless permutations

KEY FEATURES

PRICE £899
DESCRIPTION Digital reverb pedal, made in the USA
CONTROLS Bass, mids, cross, treble, mix and pre-delay faders. Arcade buttons for jump, type, diffusion, tank mod and clock. 2x multi-function footswitches
CONNECTIONS Stereo 1/4-inch input and output jacks, MIDI-in and through, expression pedal and auxiliary inputs
POWER 9V DC centre negative only (500 mA)
DIMENSIONS 167 x 148 x 75mm
CONTACT chaseblissaudio.com

However, as anyone who has used an original 224 or a modern plugin emulation will tell you, its learning curve can be quite steep. It's with more than a little trepidation, then, that we approach the CXM 1978. Thankfully, we needn't have worried.

There isn't a traditional potentiometer in sight but each of the sextet of flying faders reacts individually to preset changes, expression pedal control, control voltage and MIDI. Switch presets and the reassuringly substantial faders will move to recall the saved position of each parameter, providing an instant visual reference point and forming the basis of an intuitive user interface that's much easier to grasp than the unit that inspired it.

The first four faders are labelled bass, mids, cross and treble and they combine to shape the size and tone of the reverberations. The cross fader acts as a moveable frequency splitter by setting the crossover point of the bass (0-362Hz) and middle (362-1700Hz) faders, while the treble control darkens the reflections.

Pre-delay sets the delay time before the onset of the reverb in conjunction with the arcade-style 'clock' button below it, which defines the reverb fidelity and length of the pre-delay. Each of the three reverb fidelity settings has a unique tonal character and response, from 48kHz/32-bit input resolution in hifi mode, 24kKz/16-bit for authentic late 1970s tones in standard mode, and a lo-fi mode in which the higher the pre-delay, the more the sound quality falls apart, which delivers gritty, filtered reverb textures.

When it comes to the other arcade buttons, jump lets you skip to a favourite preset and type toggles between room, hall and plate 'verbs. Diffusion sets the smearing of the initial note attack and, depending on the type of reverb selected, provides additional features such as "a sparse mode that surrounds the attack with a cloud of soft delay taps" when set to low diffusion in hall mode. Finally, tank mod does what you'd expect it to and sets the amount of modulation in the CXM pedal's virtual reverb tank.

IN USE

Our initial uncertainty lasts about as long as it takes to read this sentence. We're soon creating everything from studio-grade room and plate reverbs worthy of any mix to crunchy lo-fidelity slapbacks, dark hall pads and immersive ambient washes – all with ease. It's endlessly creative.

While pulling off that rare trick of sounding simultaneously fresh yet reassuringly familiar, the audio quality of the CXM's reverbs is stunning. Controlling the decay of frequency bands has a vivid effect on both the feel and the sense of space that surrounds your playing.

Get connected: the rear panel offers flexible connectivity options

And while the pedal is excellent in front of a single guitar amplifier in mono mode, we strongly recommend hooking up a pair of amps and experiencing this unit in stereo. We've simply never heard such rich depth and three-dimensional realism from a pedal reverb before.

Plug in an expression pedal and things get even better. Setting up global expression control over the reverb mix level is simple and very effective. But don't stop there: you can get even more creative by morphing between vastly different fader positions via toe and heel-down settings – and there's plenty of uncharted territory just waiting to be explored in the liminal spaces between those extremes.

Innovation doesn't come cheap – nor do moving parts and bespoke enclosures – and there's no denying that the CXM is a serious investment. However, as well as the default unbalanced instrument level, it can be switched to balanced line level, which transforms the unit into a powerful outboard processor in the studio, upping its value-for-money quotient considerably.

If you're thinking of splashing out on a CXM for your pedalboard and are worried about the durability of the faders, fear not. Chase Bliss claims to have tested them rigorously in real-world conditions and the company is also developing a removable cover for the fader section to keep it safe from clumsy boots.

While this unit takes inspiration from the Lexicon 224, it's far from a mere clone. Chase Bliss and Meris should be applauded for elevating the humble reverb pedal concept to a whole new level of tonal excellence and creative potential. G

9/10 **Ambient soundscapers had better start saving those pennies – this is your new favourite pedal**

LIKE THIS? TRY THESE...

Meris Mercury7 **£299**
Chase Bliss Audio Dark World **£349**
Strymon NightSky **£439**

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WALRUS AUDIO

MAKO SERIES R1 & ACS1

WORDS RICHARD PURVIS

The US effects brand has expanded its award-winning Mako Series with an extra-spacey stereo reverb and a two-channel amp simulator with its sights set on Strymon. Has it jumped the shark? No chance

We were warned last year that the world-conquering D1 multi-mode digital delay pedal, the inaugural entry in Walrus Audio's high-end Mako Series, wouldn't be an only child for very long. Well, bake a cake and crack open the bubbly – because this time it's twins.

Sticking closely to the D1's classy design template, Walrus's R1 reverb and ACS1 amp and cab sim fill out the Mako line in moody black and opulent gold, respectively. Both sport the same side-mounted mono/stereo inputs and outputs, and the same control layout. But will they make the same impact as our 2020 pedal of the year?

The reverb trend in 2021 seems to be ultra-lush modulated epicness but the R1 isn't just here to blow our own minds with celestial sorcery. Three of its six modes are dedicated to the basics: spring, hall and plate. The others are BFR (two of those letters stand for 'big' and 'reverb', let's just leave it at that), Refract and Air. That'll be the ethereal half of the pedal, then.

The key thing to note in terms of operation is that everything here revolves around editable presets. You have nine slots accessed via the A/B/C toggle and footswitches, plus another 119 via MIDI; the controls only become 'live' once you start twiddling them, which means their positions aren't always telling the truth.

Take the bait: the R1 and ACS1 are the latest in Walrus's Mako Series

What are those controls? Along the top, we have decay time, ranging from nothing to practically forever; swell, for killing the note attack and letting it fade in as slowly as you choose; and mix, which will mute the dry signal completely when maxed out. Tweak and tune let you adjust the modulation, pre-delay and EQ, plus an 'X' factor specific to each reverb type.

Finally, the second footswitch takes a snapshot of the current sound and sustains it magically until you tap it once more or, if you've kept your foot pressed down, lift it up again. Yep, it's the same idea as the 'infinite' footswitch on Strymon's rival NightSky unit. Let's hope it's every bit as bewitching.

Ah yes, Strymon. The most striking feature of the ACS1 is how closely it appears to follow the formula laid down by that company's Iridium amp and cab sim. But can you blame Walrus for that?

The arrival of the Iridium in 2019 turned out to be a bit of an iPhone moment: it wasn't the first device of its type but it was the first to do its job with such clarity, simplicity and downright quality that it effectively created a whole new product category for itself. The ACS1 is its first heavyweight competitor.

This is a compact solution for letting you do whatever you'd normally do with an amp, without an amp. The two obvious applications in these gig-free times are silent home recording and headphone practice but it'll be at home on any pedalboard should you ever get the chance to play to a wider audience than your pets.

Like the Iridium, the ACS1 is built around three amp models – a black-panel Fender, a Marshall and a Vox – with a range of impulse responses emulating mic'd speaker cabinets. So far, so familiar. The controls are virtually identical too, right down to the three-way toggle switches for amp and cab models.

But wait! There's another switch marked L + R – and it's important. Keep this in the middle position and you'll get the same sound through both outputs. But flip it to either side and you'll only be changing that half of the signal – which means you can put the same amp through two different cabs at once or even build a stereo image using two totally different sounds.

As with the R1, though, there's no manual mode. Having two channels but only one set of controls means this unit is reliant on presets, with three available through the footswitches and 128 via MIDI. Might that put off players who are being tempted away from real amps for the first time?

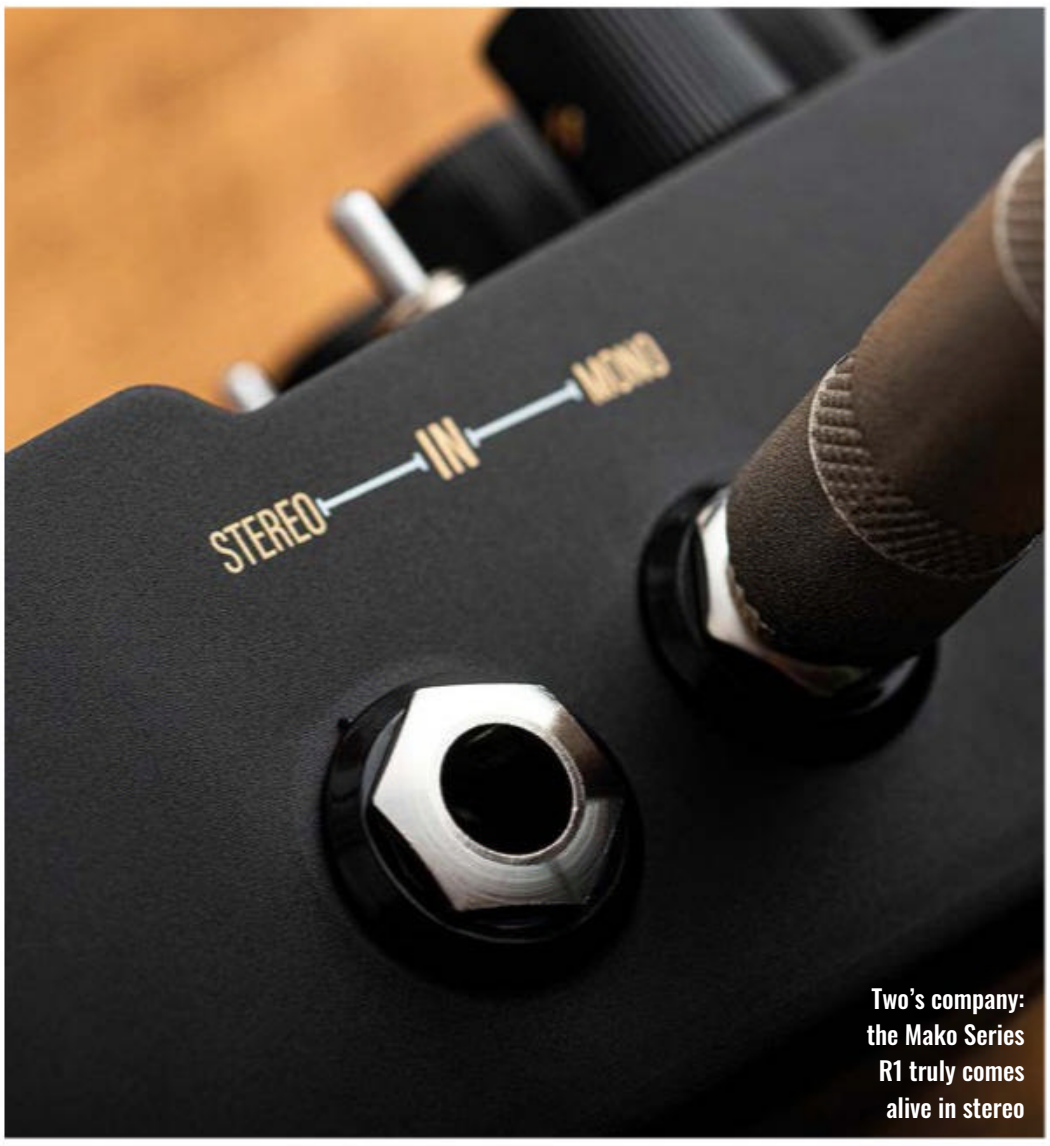
IN USE

Our explorations of the R1 begin with spring reverb and, to be honest, we're a little disappointed. It's springy but the tonality of the effect is quite mid-focused, with less zingy freshness than we've come to expect from real spring tanks – and from other digital emulations.

The hall and plate effects have a similar kind of voicing and there's still not much air in the reverb even with the high EQ at maximum. But the R1 begins to make more sense once you abandon all thoughts of subtle ambiences and dive into deep space. And it makes even more sense once you plug in a second amp.

In glorious stereo, the hall effect does sheer hugeness about as well as any other pedal of its type. Now the modulation comes into its own, allowing you to add just as much background wobble as you need to lend things a sense of shoegazey 3D depth.

Flipping to BFR mode, we're forced to reassess our definition of huge from the previous paragraph, because it really goes up a notch here. Walrus describes this effect as "a vast cavern filled with choirs of angels". It's not something we've been able to test for accuracy but it does go some way to describing its harmonic richness.



Two's company: the Mako Series R1 truly comes alive in stereo

Around the world: from California to Kent, these amp models go global

Swear on it: the enormity of the R1's BFR mode is worth shouting about

The refracting reverb creates a similarly dreamy wash but adds glitchy stutter effects, while Air mode is as close as this unit comes to an octave-up shimmer effect. There are certainly higher notes at play in this bright and breezy swoosh-scape but they are textural rather than overt.

Could we be any more blissed-out? Actually, yes – and a single prod of the sustain footswitch is all it takes. Play over the top of your sampled snapshot if you like but you might not feel the need to add anything to this mesmerising loop of quivering strangeness.

It's a tough pedal to turn off… but we do, because it's time to test the ACS1. Sparking it up in mono mode, the first preset – based on a Fender Deluxe Reverb – twinkles from our studio monitors with instant prettiness. It sounds bang-on and has an openness to the mids and a roundness to the bass that makes the Iridium sound ever so slightly flat in comparison.

There are two cab models matched to each amp, the second accessed by holding down the bypass footswitch. In this case, that means the standard 1x12 or the 4x10 of a Super Reverb, offering the same basic sound but with a smoother, deeper voice. It's no less lovely – and no less effective as a platform for dirt pedals.

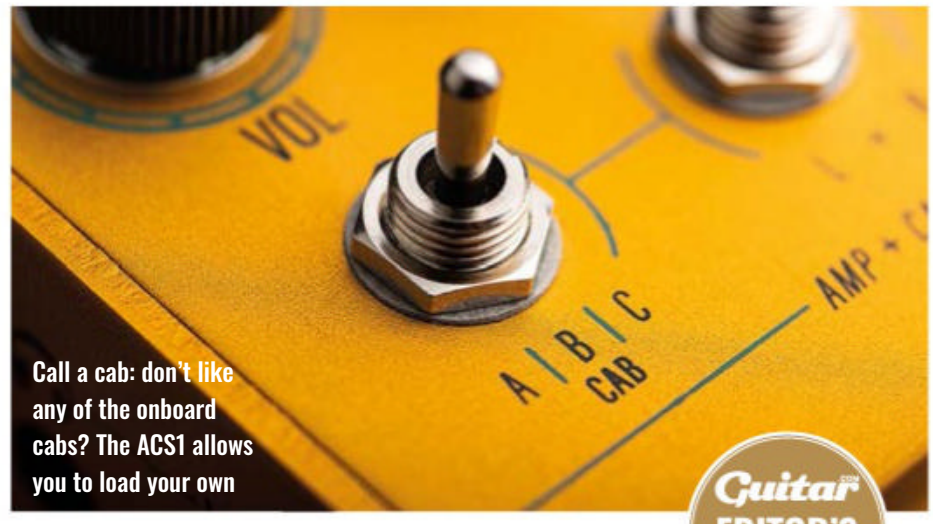
Now we go from Fullerton to London, where Jim Marshall first built his 2x12 Bluesbreaker combo. You'll struggle to get high-powered lead tones here without any external help, as the ACS1 boasts less gain than the average Marshall-in-a-box preamp, or indeed the Iridium. But the core tone is addictively fluffy nonetheless, and a gentle shunt from a Tube Screamer is that's needed to make it properly sing.

The onboard boost isn't as helpful – it just engages a secondary volume and gain setting rather than adding anything extra – but it's a handy feature anyway. Your cab choice here is Marshall or Two-Rock, each bringing its own distinctive and lifelike character.

The appearance of the name 'Dartford' on a pedal of this prestige is sure to amuse anyone who's ever actually been there but the humble Kent town happens to be the birthplace of the Vox AC30. Again, this model can't compete with Strymon's version for gain range but it's a close match in terms of pure tone, whether you go with Blue speakers or Greenbacks.

Teaming an amp up with a 'wrong' cab is a simple matter of flipping the left-hand switch, and there are plenty of interesting options to explore. Likewise, sending different sounds to each output opens up all manner of wild possibilities – and not just for stereo imaging: you might, for example,

Head music: the ACS1 may look like a regular stompbox but it comes equipped with a stereo headphone output



Call a cab: don't like any of the onboard cabs? The ACS1 allows you to load your own

lay down a bright sound on one channel and record a bassier version on the other before blending them to taste in the mix.

What's missing? Well, an effects loop and USB audio output would have been nice. There's also a nagging feeling that, in a more philosophical sense, Walrus could have done more to make this product stand apart from its obvious inspiration. But the one thing that's really lacking here, even more so than with the D1 and the R1, is that manual option. Being tied to presets really can be a drag at times – would it have been so difficult to include a one-channel mode that allows you to control the device like a normal pedal, with six knobs and two switches?

That iPhone-like simplicity is the one area in which, right now at least, the ACS1 can't compete with the Iridium. Even so, we suspect that for many people the sheer depth and purity of this unit's clean sounds will be enough to give it an irresistible edge. Your move, Strymon.

KEY FEATURES

MAKO SERIES R1
PRICE £319
DESCRIPTION Digital multi-mode stereo reverb pedal, made in the USA
CONTROLS Decay, swell, dry/reverb mix, modulation rate/depth/pre-delay switch with tweak knob, EQ low/high/X switch with tune knob, preset bank A/B/C switch, six-way rotary programme switch; bypass and sustain/latch footswitches
FEATURES Mono/stereo inputs and outputs, micro-USB for firmware updates, five-pin MIDI-in and through; 9 presets, with up to 128 slots accessible via MIDI; switchable true, DSP or true+DSP (for trails) bypass; powered by 9-volt mains supply only (not supplied)
DIMENSIONS 126 x 75 x 63mm
CONTACT walrusaudio.com, face.be

8/10 **Wondrous for stereo space exploration but not as strong on the humdrum stuff**

LIKE THIS? TRY THESE...

Chase Bliss Audio Automatone CXM 1978 **£899**
Strymon NightSky **£439**
Red Panda Context V2 **£299**

Guitar EDITOR'S CHOICE

KEY FEATURES

MAKO SERIES ACS1
PRICE £365
DESCRIPTION 2-channel digital amp and cab simulator pedal, made in the USA
CONTROLS Bass, middle, treble, volume, gain, room; cab A/B/C switch, channel left/both/right control switch, Fullerton/London/Dartford amp model switch; bypass and boost footswitches
FEATURES Mono/stereo inputs and outputs, stereo headphone output, micro-USB for IR management and firmware updates, five-pin MIDI-in and through; 3 presets, with up to 128 slots accessible via MIDI; powered by 9-volt mains supply only (not supplied)
DIMENSIONS 126 x 75 x 63mm

9/10 **Just different enough to justify its place in the world and capable of stunning tones**

LIKE THIS? TRY THESE...

Strymon Iridium **£379**
DSM & Humboldt Simplifier **£299**
Atomic Ampli-Firebox **£299**

EARTHQUAKER DEVICES
ASTRAL DESTINY

WORDS RICHARD PURVIS

Many digital reverb pedals have options for adding an ethereal upper octave but this eight-mode beast is a dedicated shimmer machine

The shimmer effect has been around since the 1980s, back when players would combine reverb and octave-up pitch-shifting to create textures so lushly celestial that audiences would be too mesmerised to notice their terrible hair. This, though, might be the first time shimmer has had a whole multi-mode stompbox to itself.

The EarthQuaker Devices Astral Destiny is a digital reverb pedal that's all about the strange and unnatural stuff added on top: it has a dedicated modulation section and eight modes for different varieties of pitch-based otherworldliness, including two with automatic note-bending. Unsurprisingly, this could get quite weird.

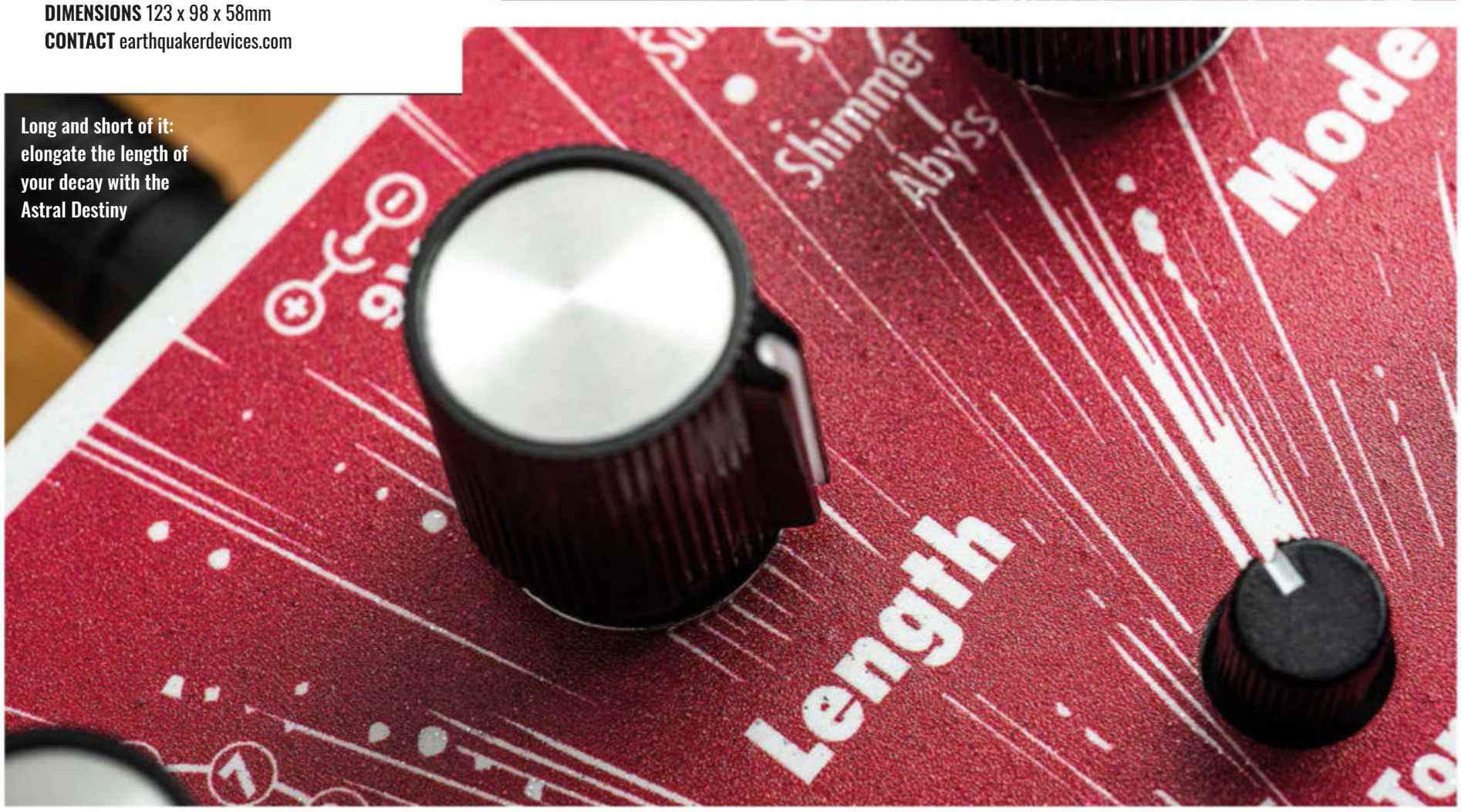
Resplendent in sparkling white with metallic red artwork, this is a dual-footswitch pedal with bypass on the right and 'stretch', which slows the decay down to half speed, on the left. The mini knobs in the middle handle the basics – depth and rate for the modulation, tone and output level for the reverb itself – while the three controls at the top are full-size, as they're the ones you're most likely to be fiddling with.

The eight-way rotary on the left lets you toggle through stored settings once you've held down the main footswitch to go into preset mode; in the middle, length dictates how epic your reverb will get; on the right, we find the eight different reverb types. Only the first, Abyss, has no octave effect.

Stare into the Abyss: one turn of this rotary switch can take you from the Abyss to the Cosmos

KEY FEATURES

PRICE £205
DESCRIPTION Digital reverb pedal with modulation and octave effects, made in the USA
CONTROLS Preset 1-8, decay length, reverb mode, modulation depth and rate, reverb tone and mix (level)
FEATURES Live and preset operating modes, input for assignable expression pedal (TRS), buffered bypass with switchable trails, analogue dry signal path; powered by 9-volt mains supply only (not supplied)
DIMENSIONS 123 x 98 x 58mm
CONTACT earthquakerdevices.com



Long and short of it: elongate the length of your decay with the Astral Destiny

IN USE

We're expecting hugeness from the off and that's exactly what we get. Even in the octave-free Abyss mode with the modulation depth at zero, anything above half length will transport you directly to the middle of the nearest cathedral (although admittedly, most cathedrals are, unlike this pedal, stereo). The maximum decay time is somewhere around 12 swirling seconds.

The next three modes are straightforward enough, adding an up octave, a down octave and a bit of both, respectively. But it's the right-hand side of that mode dial where the textures start to get really heady. Ascend and Descend bring gradual pitch-bends that are just harmonically complex enough to sound mystical rather than woozy, while Astral and Cosmos add more intervals for a kind of gently swelling grandeur. Go easy on the proggy chord voicings here though – the sheer density of the reverb means single notes and gentle arpeggios work best.

Dialling in a touch of modulation makes everything that little bit more colourful – or downright fruity if you crank the depth for full-on vibrato – while, rather cleverly, the stretch footswitch plunges you down to half-speed (and therefore an octave down) either instantly or gradually, depending on whether you tap it momentarily or keep your foot down.

That said, aside from this stompbox's assorted pitch-bending tricks and the option to create more dynamic effects by pairing it with an expression pedal, there isn't an enormous amount of tonal variety on offer here. It's true that EarthQuaker Devices' Astral Destiny gives you the shimmer, the whole shimmer and (almost) nothing but the shimmer. But only you can decide if that's enough for it to merit a place on your pedalboard. G

8/10 **Several flavours of the same basic sound but it's a suitably cosmic one**

LIKE THIS? TRY THESE...

Strymon NightSky **£439**
Meris Mercury7 **£319**
Walrus Audio Slo **£179**

GREUTER AUDIO

MOONLIGHT & VIBE

WORDS MICHAEL WATTS

Guitar EDITOR'S CHOICE

A new stompbox builder straight outta Zürich throws his hat into the ring with boutique fuzz and vibe pedals

Like many boutique pedal-makers before him, Switzerland's Sascha Greuter has been obsessed with sound and electronics since childhood. Years working in a guitar shop gave him access to holy grail products but it was his experiences as a musician that informed what began as modifications and became a range of meticulously hand-made units under his own name.

The Moonlight is Sascha's take on the well-trodden but famously cantankerous Fuzz Face circuit, while the Vibe is his spin on the Shin-ei Uni-Vibe. Both of Greuter's hand-numbered enclosures feel dependably solid, with smooth potentiometers and positive, heavy-duty footswitches. While primarily inspired by vintage circuits, both pedals bristle with knobs and miniature toggle switches that offer levels of functionality and flexibility that the effects that inspired them never had.

For many years, boutique fuzz creators had a tendency to concentrate on rarefied permutations of the Big Muff circuit but these days makers are increasingly leaning towards the expressive and nuanced lower-gain qualities of vintage Fuzz Face alternatives. And while that original design was almost insultingly simple, with just volume and fuzz knobs alongside a footswitch, Greuter's eye-catching yellow and black Moonlight doubles the knob count with additional input and bias controls surrounding a miniature toggle that grants users three degrees of bass cut.

Vibe out: the Greuter Vibe's gain and intensity controls are side-mounted

KEY FEATURES

GREUTER VIBE
PRICE £320
DESCRIPTION Vibe pedal, made in Switzerland
CONTROLS Vibe, speed, intensity and gain knobs. Mode and age mini-toggles. On/off footswitch
FEATURES True-bypass switching, 9V centre negative power input (mains only)
DIMENSIONS 135 x 92 x 70mm
CONTACT greuteraudio.ch

The Shin-ei Uni-Vibe was designed by Japanese audio engineer Fumio Mieda. A simulation of a Leslie rotating speaker's Doppler effect, it employed a light bulb and photoresistors to control a four-stage phaser and a unique LFO curve. It wasn't an immediate success but once the pedal fell into the hands of Jimi Hendrix all bets were off. The Uni-Vibe's characteristic tectonic shudder became a favourite of electric guitarists and remains so today.

Straddling the modulated sweet spots of chorus and vibrato, the Uni-Vibe originally came with an external expression pedal, which is absent here as in many similarly updated designs. However, Greuter has made improvements to the circuit.

The design has vibe and speed knobs big enough to be tweaked with a casual toe, as well as twin mini-toggles. Mode switches between chorus and vibrato, while 'age' hops between two input sections for vintage throb or modern shimmer. There are side-mounted controls for gain and intensity too.

IN USE

We begin our taste test with a Trussart Deluxe Steelcaster into an early Cornford Hurricane and the Moonlight parked at the front of the chain, as is the way with vintage-style fuzzboxes. Experience tells us to bump the fuzz control all the way up, with the remaining knobs at noon and the mini-toggle dressed to the left for full bass.

Kicking off with the bridge pickup, we encounter a deliciously hairy overdrive with a hint of sawtooth to keep it honest. It's a poky sound with bite at the front end of the note blossoming into a sustained rasp. Given the sensitivity of germanium components to temperature fluctuations, it makes sense that Greuter included a bias control. More than just a tone control, this knob governs with precision a wide spectrum of timbral response, from Baby Fuzzopotamus to Bearded Ladyland.

Switching through different pickups while dialling up the input adds a large helping of gain, taking the Moonlight into more aggressive territory. A nudge on the output pushes the amp beautifully and enhances the snarling fuzz but the guitar's voice remains impressively present and focused throughout. This is some serious Moonlight alright.

Shoot for the moon: Greuter's fuzzbox boasts some modern updates

KEY FEATURES

GREUTER MOONLIGHT
PRICE £220
DESCRIPTION Germanium fuzz pedal, made in Switzerland
CONTROLS Input, fuzz, output, bias knobs. 3-way bass cut mini-toggle. On/off footswitch
FEATURES Matched Russian germanium transistors, true-bypass, voltage inverter, 9V centre negative power input (mains only)
DIMENSIONS 120 x 56 x 165mm

Thinking cap: Greuter's pedals are hand-wired by Sascha himself

Sliding the Vibe into our chain with the gain and intensity at halfway and the vibrato mode engaged gives a shimmering, sinuous movement to chord melody and doublestops – especially when using both pickups. It's a usable, evocative sound in its own right, with a bit of grit as you turn up the gain. However, it's the chorus voice of the Uni-Vibe that's associated with classic recordings at the feet of players such as Jimi Hendrix, David Gilmour and Robin Trower, so doubtless this is where most such pedals will spend their lives.

Uni-Vibe can be a tough texture to get right as it can easily become watery thanks either to too much chorus or too much phase, thus losing the gritty pulse of the real thing. That's not the case here. The Greuter Vibe has much of the character of a vintage unit, especially with age switched to the 'old' position and the gain pushed up. Then a flick of the age switch catapults us forward four decades to a modern swooshy vibrato with more top-end sheen.

Vibe-style pedals are often best used when positioned before distortion pedals and running into an amp that's dialled in to properly shift some air and get some tooth-rattling bass moving. Dutifully, we add the Moonlight after the Vibe and warm our trusty combo up to full clip – and it is good. Very good, in fact.

It's always interesting to hear how two pedals from the same maker work together. In this case, the combination of Moonlight and Vibe makes for a powerful voice that comes shuddering out of the 1x12 cabinet. It's a truly exhilarating take on that iconic, chewy sound so beloved of classic rock and psychedelic blues aficionados. The pedals bring out the best in one another, the fuzz contributing warmth, bite and aggression, the Vibe bringing depth and movement, with neither pedal being overpowered nor becoming thin or indistinct.

While Greuter Audio may be a new name to many players, on the strength of this pair of quality hand-wired boxes, the brand should be on the radar of anyone browsing the boutique end of the market for extremely convincing classic tones coupled with well-thought-out modern tweaks. G

9/10 **Classic effects reimagined with stellar tones and increased versatility**

LIKE THIS? TRY THESE...

GREUTER MOONLIGHT
Dunlop Fuzz Face **£149**
Phil Robinson Silicon Phuzz **£169**
Vemuram Shanks II Fuzz **£439**

GREUTER VIBE
EHX Good Vibes **£119**
Walrus Audio Julianna **£225**
Dunlop JD4S Rotovibe **£233**

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INDUSTRY INSIDER

BLACK BOBBIN

INTERVIEW SAM ROBERTS

Wake up, smell the coffee and bid welcome to Black Bobbin, reimagining guitar retail through partnerships and high-quality brews

Offset aficionado Shelby Pollard cut his teeth at Chicago Music Exchange but now he's struck out on his own with a new guitar retail venture that combines his passion for boutique gear and small-batch coffee, while ensuring the customer comes first through exclusive brand partnerships.

How did you get into guitar?

"Music was always part of my family's life even though neither of my parents played an instrument. My father notes that even as a toddler I'd make him turn the radio up in the car. One Christmas, I got a Harmony guitar and amplifier that I'd circled in the Sears catalogue from my grandmother. I think it sat in my room untouched for a while but then at about the age of 13 I really became enamoured with it. I distinctly remember the moment that I decided I wanted to play guitar for the rest of my life: I was watching MTV and Blink-182 came on the screen – and at that moment I knew!

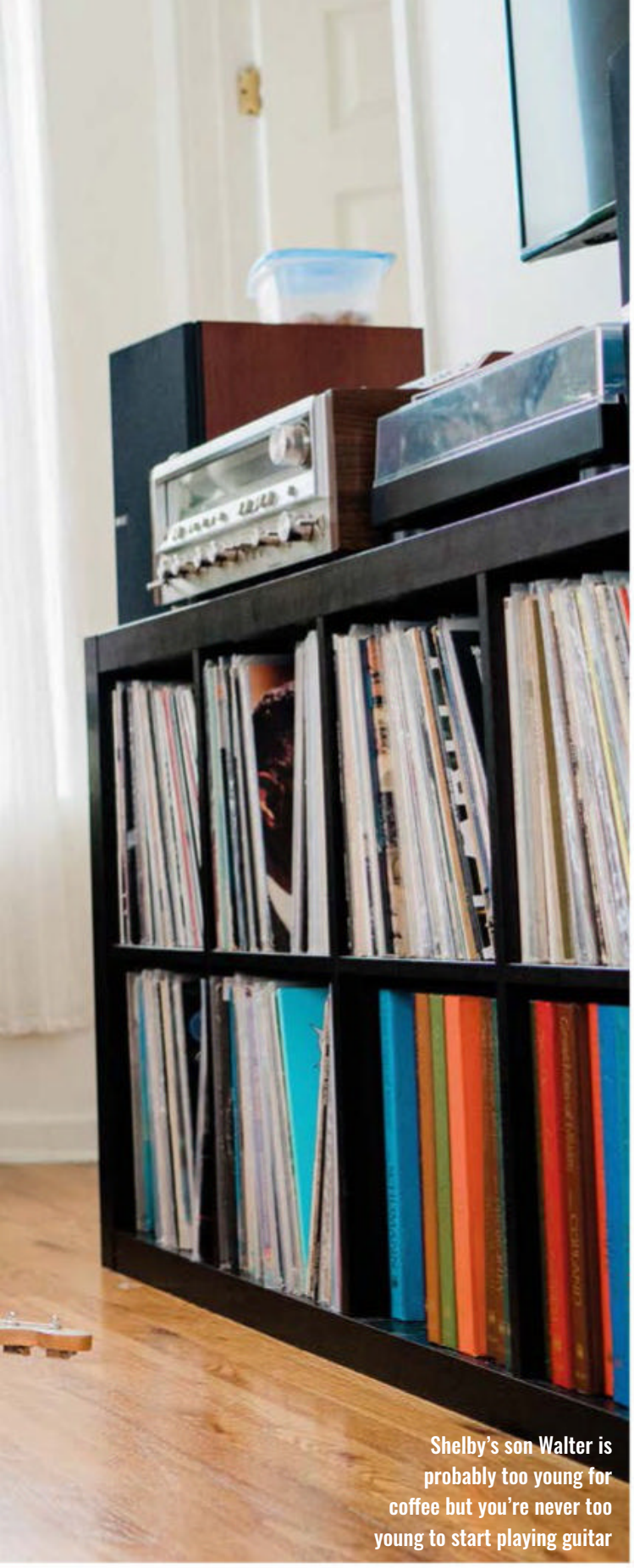
"My stepfather said that I locked myself in my bedroom and tried to play *Dammit* on repeat until one day I was just playing the guitar. I used to sit in my bedroom and take my guitar apart and put all the screws and parts inside an empty Cry Baby box, and then put it all back together. I was completely mystified by this thing and still am to this day."

What aspect of your business model stands out?

"Our aim is to elevate boutique brands with exclusive partnerships. The current industry model of carrying a brand's core product means that retailers are effectively vying for customers' loyalty at checkout. We have launched exclusive runs so far in batch windows, where we allow customers to determine the size of the launch and the viability of the project over our lifetime. This really helps takes the guesswork out of our inventory management. It creates a strong representation of the companies that we work with, and ensures there are no complications in competing with other retailers. We work hard to be thoughtful about our partnerships because these are also long-time friendships and people we really respect."

When did you realise you had a viable business?

"Ultimately that remains to be seen because we're just at the beginning of what are to be some exciting and big plans. I left two jobs in 2020 and redirected what was a



Shelby's son Walter is probably too young for coffee but you're never too young to start playing guitar

five-year plan into what turned out to be a three-day plan. I came home from work on a Friday and put down a few name ideas on my phone, I bought the domain name on Saturday morning and then I asked Mason Stoops to design our logo on Sunday. The confidence in the viability of the business plan grew as I had discussions with Benson Amps, Old Blood Noise Endeavors, and Lollar Pickups. It felt like every call affirmed that I was on the right path and that it was possible. I'm also very thankful to our coffee partner Gene Wilson, the owner of Gallery Cafe in Chicago. He was the first onboard to go on this crazy guitar café ride, and without that component I know I wouldn't have taken a step forward."

Did you have any external investment starting out?

"As of right now, everything has been self-funded. We have been able to bring our exclusive products to customers thanks to our batch-order windows, which allow us to fund these projects immediately, and fulfil orders to our customers."

Black Bobbin collaborated with Lollar on these Jazzmaster pickups

When did you feel like you'd nailed your branding?

"For branding to be effective, it has to be genuine and maybe a bit accidental. When I look back at my first video at Chicago Music Exchange, I can hear how nervous I am to be on camera. But I felt people responded really positively to someone who loves Jazzmasters and wasn't interested in seeing how many notes he could play in a demo. I've been working on what I would say is now Black Bobbin's branding since then. The goal of the guitar café model is to be connected to every facet of the music community in Chicago, whether that be as a resource for an instrument or a place to meet over a coffee. We've seen how positively people are responding to our brand, and we know it is because they can envision where we're going and want to be part of the journey."

How do you develop in an ever-changing market?

"From years of experience, I've seen that you need to be fiercely protective of your integrity as a person and also as a brand, and if you can do that, the market comes to you. That is to say: do what you love, put your word behind it and people will recognise sincerity."

What's your proudest moment as a business owner?

"When you're starting a business, the only thing you have to base 'work' on is all your collective previous experiences. My proudest moment was when I realised that I'm in complete control of what 'work' looks like, and for me that means putting my family first and flexing my 'work' time around that. My primary role at home while I'm building Black Bobbin is taking care of my son Walter, which has been a massive gift in the face of what is a very difficult time to navigate due to COVID. Once I shifted my work around what's best for my family and figured out how to uphold my standard of quality for both worlds, I knew I could do this forever. The second-proudest moment was when I received our first set of Black Bobbin Lollar Jazzmaster pickups and realised that if all I did was install these pickups and Mastery bridges in Jazzmasters, I would be a very happy person indeed. What's better than sharing your passions with others?"

What are the biggest opportunities for the guitar industry in 2021?

"There are two big opportunities on the horizon right now for the industry. The first is to increase the diversity of the musicians represented in the field. The old guard of this industry is still looking for the next SRV to rep their brand, all the while players like Naia Izumi, Vanessa Wheeler and Sarah Lipstate are exploring the edges of what the instrument can be used for. The industry has the opportunity to be the model of inclusion for other areas of the business world. The second opportunity is to remind our customers that these are instruments to be used to create, not just commodities to be sold. A guitar is one of the most intimate musical instruments, since it makes such physical contact with the player, and we all need to encourage each other to spend more time in that space."

What's next for Black Bobbin?

"When the time is right and safe for all, we'll be looking for a place where locals and travellers can gather over a cup of coffee, guitars and good conversation. For the time being, we have more partnership launches planned and to be announced online, and we look forward to meeting more people who are passionate about coffee, guitars and music."

To find out more, visit blackbobbin.com and follow @blackbobbinchicago on Instagram

SHOP TALK

TOM BARTLETT
BARTLETT GUITARS

WORDS DAVE HUNTER
PHOTOGRAPHY BARTLETT GUITARS

Tom Bartlett's guitars are the result of an intense obsession with the Les Paul legend and a penchant for doing things the old way

Call it ironic, perhaps, that Canadian guitar maker Tom Bartlett's deeper love of vintage Bursts was fuelled by his own disappointment in his first real Les Paul. But so it began. Such was the fervour with which Bartlett chased the Burst down the rabbit hole that, in addition to having crafted several highly regarded detail-perfect reproductions, he has long run a successful side business selling components and luthier supplies to help other hobbyists do the same. The crowning achievement of his own guitar making, however, came in putting his own original twist on the style. But that was some time in the making – and to get there he had to learn the legend inside-out.

"I grew up in Ontario," says Bartlett, "just outside of Toronto, and as soon as I was exposed to music, really, as an independent listener, that's all I did. Forever more it was just me walking around with headphones on and absorbing as much as I could. Particularly the rock 'n' roll of eras past, even. It was such a huge influence on me and I immediately wanted to play the guitar but could not play it at all.

"A friend of mine got an electric guitar – we were maybe 10 or 12 years old – and I thought, like, 'I'm immediately going to sound like Eddie Van Halen'. I picked it up and just couldn't make a sound out of it that was pleasing at all. It was terrible!"

Unlike many potential players who are turned off the instrument never to return, Bartlett's obsession was such that he persisted. A low-quality acoustic guitar from his parents led to the promise of an electric after a year of determined playing – and play he did.

"I played it for hours every day," Bartlett recalls. "And then I spent the next years and years trying to build up enough money and resources to afford a Gibson Les Paul, you know? That was always the pinnacle. And it didn't matter to me what year it was – none of that made any difference to me. It wasn't until I was sort of an independent adult that I finally purchased my first real, branded Gibson Les Paul. But, unfortunately, I was disappointed by the quality and that disappointment is what drove me to build my first guitar.

“I USE THE OLD METHODS BECAUSE IT RESULTS IN GUITARS THAT ARE A LITTLE UNIQUE, EVEN AS FAR AS THE DIMENSIONS OF THE NECK”

ABOVE Based in Ontario, Tom Bartlett only tackles two batches of custom hand-made guitars each year

OPPOSITE The Retrospec is Bartlett’s love-letter to the late 1950s Gibson Les Paul Standard

“At the time I was a woodworker, I was a cabinet maker, and the quality control on the guitar was quite poor. I thought, ‘I bet I could build one as good or better than this.’ And so, I did. That was the beginning of the end really. After I built my first guitar, I never built another cabinet again. It was a very quick transition into guitar making.”

CALLING KALAMAZOO

For Bartlett, a big part of the quest – the part that ultimately involved doing it ‘right’ – lay in reproducing as much as possible of the work just the way it would have been done in Kalamazoo in the 1950s. Not just maintaining period-correct specs and components but putting it all together in the same ways too. The issue, of course, is that while major mid-century guitar brands had full factories to work with, as well as the benefit of assembly-line production, Bartlett is a one-man shop.

“Having been in the business now for about 12 years, I’ve learnt to try not to be frustrated by the process,” he says. “But part of the struggle is that it’s difficult for one person to learn the 500 steps that it takes to build a guitar from a raw piece of lumber to closing the case and putting it in the box. I personally only do two batches of guitars per year and it’s really hard to get good at doing 500 things when you only do them twice a year.

“So, it’s a painful process, and a lot of my fastidiousness has come from the fact that I have to do these things with very little practice. I try to remove as much margin of error as I can by building accurate jigs and creating machinery that gets me 95 per cent of the way there, and then the final five per cent is done with the finesse of somebody who has done it for a long time.”

Ultimately, the entire point is to recreate the vintage approach to making these guitars; to be all-encompassing in the effort to fire up that time machine and go back to the construction methods and materials in use more than 60 years ago, so much as is possible. This necessitates a much more labour-intensive approach than many makers are taking. But that’s what the premise demands.

“These weren’t artists building these guitars, necessarily,” says Bartlett. “It was an assembly line. I just do all those assembly line portions on my own.

But I use the old methods because it results in guitars that are a little unique, even as far as the dimensions of the neck, you know – hand-sanding takes its toll. There is some romance involved in that but I wouldn't say that it's a far different result depending on which way you get there."

None of which is to say there aren't challenges in accurately reproducing the original formula to the best of your abilities, especially 60-plus years later, when certain ingredients are difficult to come by.

"I would say the two biggest factors in having a guitar that is really great are, first, starting with great lumber," says Bartlett. "That is the most difficult portion of any guitar builder's life, procuring really great lumber, particularly old-growth lumber. And then the second part is the finish, the paint. Those two things are so hard to do right, because they're not easy to get. And the lacquer, for instance, after beating my head against the wall for a long time, I went to a lacquer manufacturer and gave them the formula of a 1950s-era nitrocellulose lacquer and took out the plasticiser. Now they give me the plasticiser in a separate jar so that I can add it back in if I want. But I never do because I want these guitars to look the way they would have if they'd been built in the 1950s.

"It's night and day when you compare it to the lacquer on a modern Les Paul – the finish is something like eight times thicker than what it is on a 1950s Les Paul. It's not even close. It's rubbery and plasticky. Try putting a rubber mat down on your snare drum and see how well it rings out, you know?"

RETRO ROCKETS

Bartlett's great leap forward came in about 2012 when he decided that the tricks he'd discovered while teaching himself to recreate a near-as-dammit original Burst could be used to create something entirely his own – or, rather, his own with a little help.

> “WE USED THE SAME AMOUNT OF MAHOGANY AND THE SAME AMOUNT OF MAPLE AS A BURST. IT’S THE SAME CUBIC CENTIMETRES OF WOOD. THE HARDWARE IS IN THE SAME SPOT”

ABOVE Bartlett Guitars is a one-man operation and Tom’s patient approach leads to guitars that are unique in their dimensions

OPPOSITE The Retro Mk2 is built to the same shape and dimensions as the original Retrospec but utilises alternative woods and hardware

“As you know,” he says, “there’s a rabbit hole there to fall into in the vintage guitar market. It’s tough to get out of that vortex but I realised a few years into it that I could apply all of these principles to a new guitar that I could freely market and enjoy and develop. So the Retrospec is the result of that effort.”

According to Bartlett, however, the project would not have got off the ground without the urging and input of a notable Burst enthusiast who’s otherwise better known for his obsession with the real thing. In addition to dealing in many actual vintage parts as well as vintage-spec replacement components, Kim LaFleur has long been the proprietor of the Florida-based Historic Makeovers, an acclaimed refinishing and refurbishing service that specialises in makeovers of recent Gibson Custom Shop Les Pauls, giving them period-correct neck and top carves, nitro finishes, and hand-ageing. LaFleur is the man that Joe Bonamassa turned to for the restoration of the badly refinished ’59 Les Paul he acquired the year before last, now known as Lazarus because of the way LaFleur helped raise it from the dead.

“Kim was the one who instigated a new design,” says Bartlett. “He’s been in the Les Paul market for a long time and he came to me and said, ‘Let’s build a cool guitar – a unique, new style of guitar’. And he actually sent me a few little mock-ups in Photoshop and stuff.

“I’d been working for a long time with [product designer] Magnus Melkersson in Sweden and that’s when I came to Magnus and said, ‘Kim and I would really like to do this new design. Would you help us with the technical drawings?’ Magnus just took it and ran with it! He was a monster with it. It was back and forth every two minutes – he had ideas flying at me. It was fantastic to work with him and still is. I still work with him a lot.”

In the Retrospec’s case, though, the veracity of the design is definitely more than skin deep. Which is to say, sure, it might look a little like a reconfigured Burst from the outside – with different lower-bout contours, a more pronounced upper-bout protrusion and, of course, a different headstock shape – but get the weights-and-measures brigade on it and the depth of that effort is fully revealed.

“We used the same amount of mahogany as a Burst,” says Bartlett, “and the same amount of maple as a Burst; it’s all the same cubic centimetres of wood. The hardware is in exactly the same spot as a Burst. If you play a Burst and switch to the Retrospec, it’ll feel like a Les Paul, and when you reach for the switch it will be right where you think it’s going to be. It’s all very deliberate.”

NO BETTER MOUSETRAP

When it comes to constructing the optimal ’59-style set-neck single-cutaway guitar, Bartlett is very much an originalist – there is no interpretation, reinvention or improvement required when the end goal is a sort of alchemical realisation of what is, for many players,

the most valued, valuable, and desirable electric guitar of all time, only new off the bench.

"There were a few people that came out with their own designs and said, 'Well, this is an improved Les Paul'," says Bartlett. "And I always thought, 'That's all well and good – there are a lot of people who are improving on the Les Paul in their own minds but an improvement could be a lateral move for someone or it could be a detriment to another person'. To me, I wasn't looking for an improvement. I was looking to replicate the perfection that is a Burst in a new suit."

Examined more closely, it's clear that a lot of these efforts – however noble their intentions and whatever perceived 'flaws' they seek to address – risk taking the results further from the ideal, which already exists in the guitar exactly as it was made circa 1959.

"A lot of people will change the classic weak point on a Les Paul: that truss rod and the dreaded neck break," says Bartlett. "They'll say, 'Let's try to mitigate that by changing the design itself' but now you've fundamentally changed the design of the guitar. That has an impact on it. There's nothing wrong with that at all but was that the intention? Was the intention to change the tone of the guitar? Because that's what you've done."

That isn't to say that there's no good place for the modified, reworked and otherwise 'improved' guitars inspired by the late '50s Les Paul. That's where a more recent model from the Bartlett stable comes in. And it fills a very valid place in his line-up. But that shouldn't be thought of as replacing the period-correct homage to the Burst.

"That road leads you to the Retro Mk2 and the wraptails, all these variabilities," says Bartlett. "You can change up the things to improve it for a specific customer who orders a custom guitar. I'm not saying that I wouldn't deviate from that formula but it's kind of, to me, why fix what isn't broken?

"When a customer says to me, 'Oh, I've owned several Les Pauls and none of them really do it for me – I want you to make one that's going to work for me and these are the shortcomings that I've found over the years'. That's what makes them a custom guitar. But you don't have to deviate from using a different type of glue, for instance, or change how you access the truss rod. But these minor differences – when really it comes down to customising a guitar for that customer, right from selecting the best tonewoods you can – really start from the ground up."

ON YOUR MARKS

The folding-in of some of Bartlett's own notes on reinventing the wheel recently delivered the Retro Mk2, a guitar built to the same shape and dimensions as the original Retrospec but using alternative woods and hardware options, along with simpler satin and solid-colour paint jobs.

"The Mk2 was sort of my personal beliefs of what I wanted in a guitar, at that moment," says Bartlett.

"And korina is such a wonderful tonewood – so under-utilised but such a wonderful tonewood. People who don't use it or would like to use it more say that they don't use it because it's so hard to get in good quality. And that is true, it's very difficult to find high-quality material. But the payment is so great on it.

"For the Mk2, I offer an internal tone chamber that is like ribbons of wood that are tuned, which is kind of interesting. But the side effect is some weight relief as well. And that is optional. Most of the Mk2 guitars are solidbodies."

In addition, the Mk2 offers a more immediate means of skirting around CITES issues that are proving more and more to be a pain in the neck for travelling guitarists. Costing somewhat less than the fancier Retrospec, it eschews that flagship model's Brazilian rosewood fingerboard, for example, for timber that doesn't require its own passport.

"It's a non-CITES, easily travelled guitar," says Bartlett. "There's nothing about it that needs a special permit. There's no pearl inlays, even the Honduran mahogany is listed on CITES Appendix 2. There's no Brazilian rosewood. It's all above-board, non-CITES wood. So that has staying power, in my mind."

Visit bartlettguitars.com for more information

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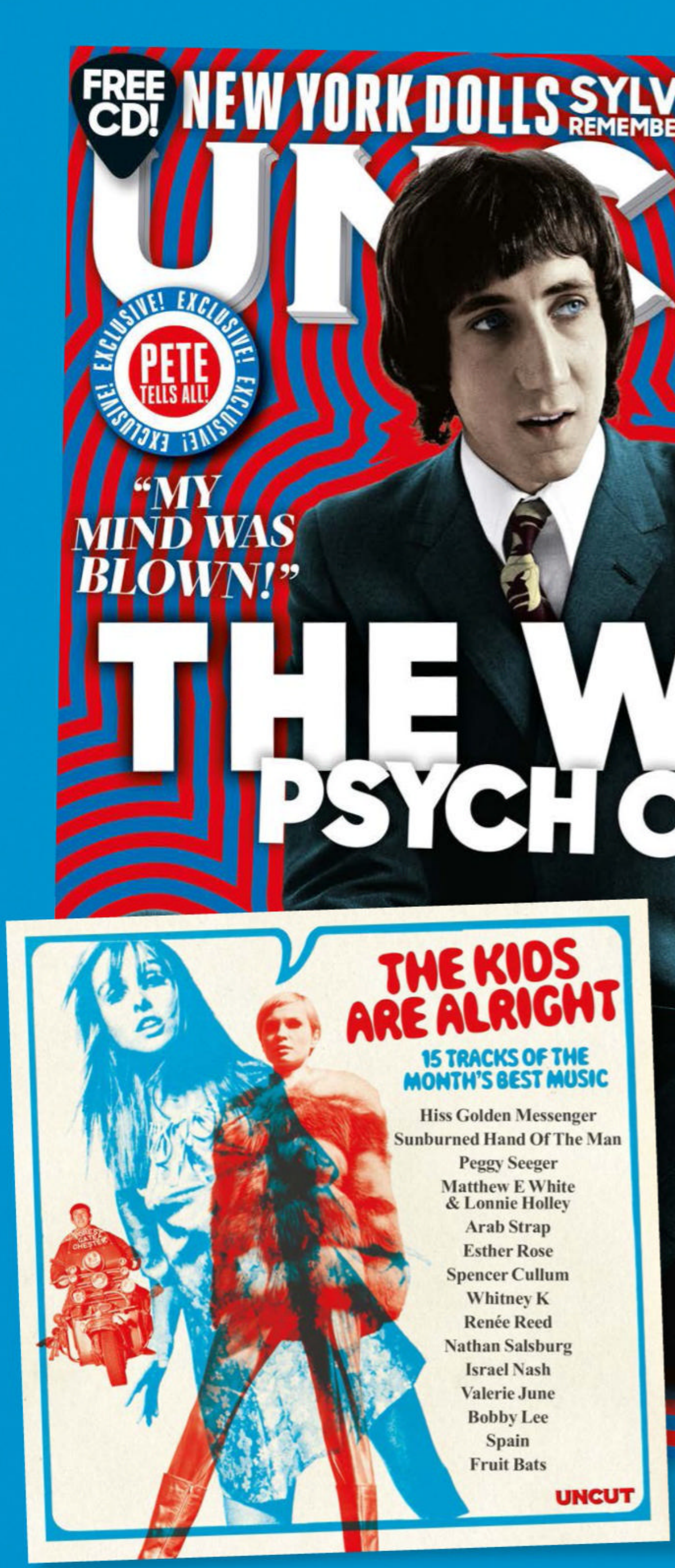

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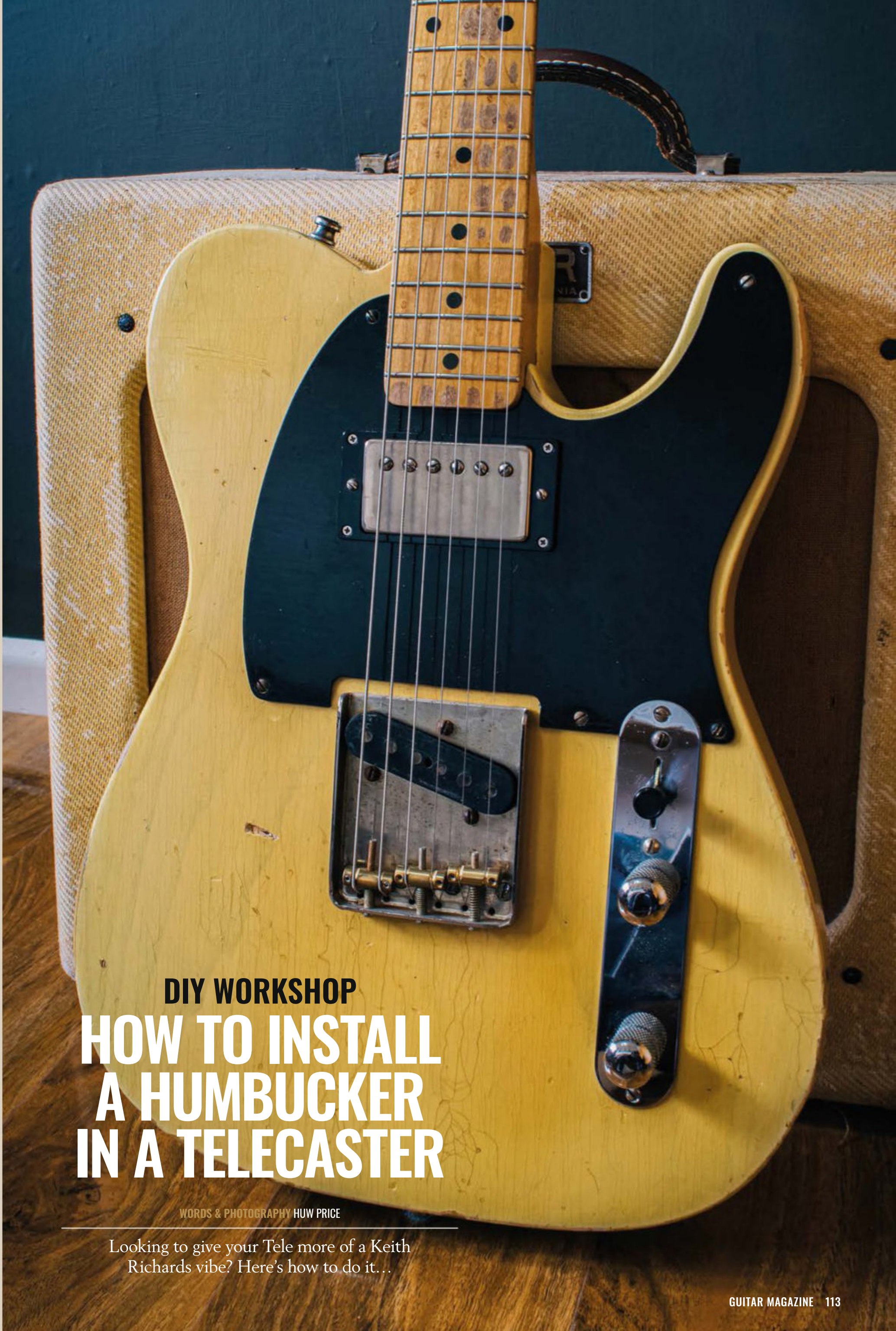


DIY WORKSHOP

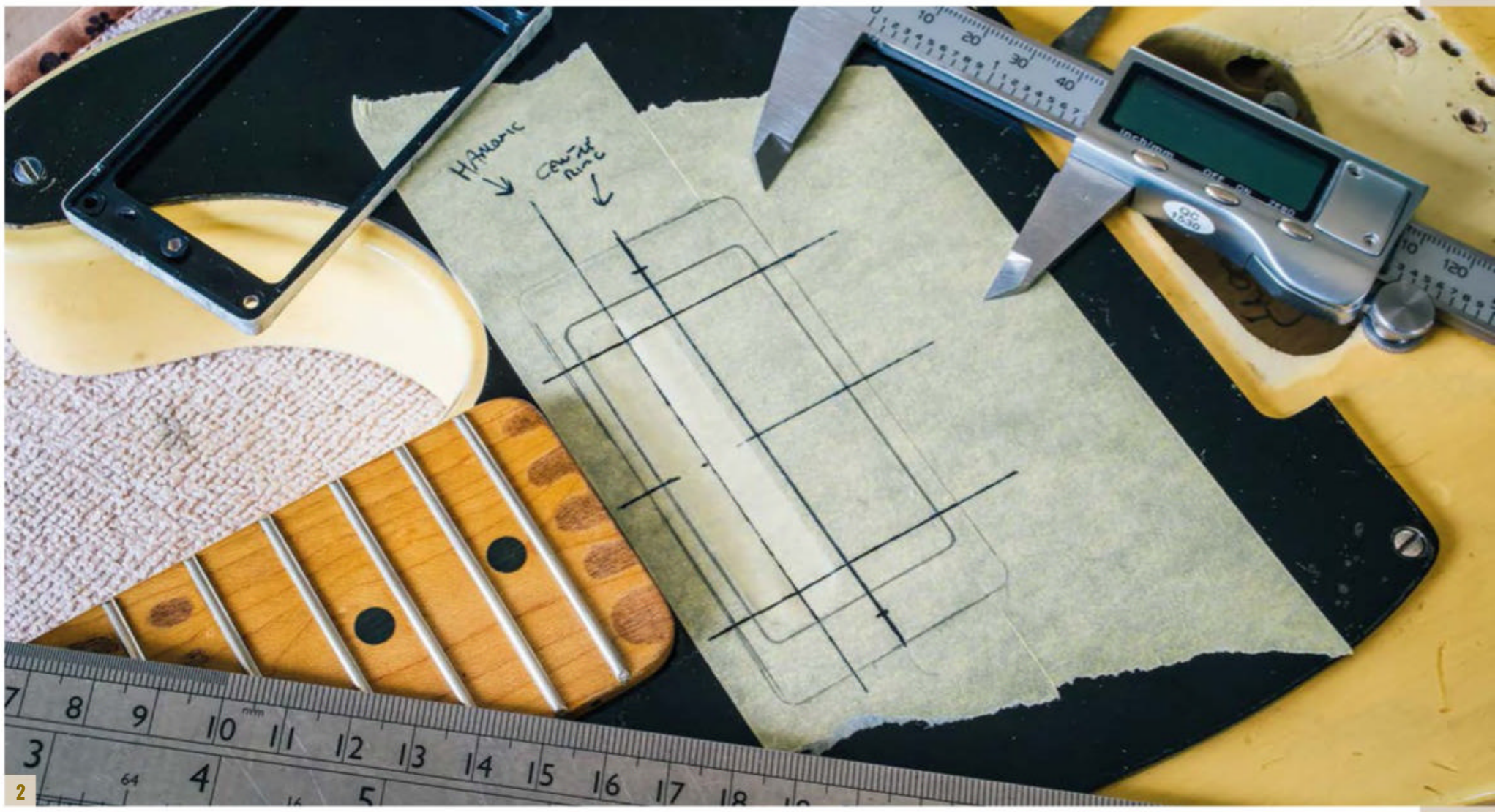
HOW TO INSTALL A HUMBUCKER IN A TELECASTER

WORDS & PHOTOGRAPHY HUW PRICE

Looking to give your Tele more of a Keith Richards vibe? Here's how to do it…

1 This guitar already has a 1953 Fender lap steel pickup at the bridge and now it's getting a vintage Gibson patent number unit in the neck position

2 Accurately marking the position of the new pickup is crucial to a successful humbucker installation



Fitting a full-size humbucker in the neck position of a Telecaster is sometimes called the Keith Richards mod but the Rolling Stones man was by no means the first to do it. Keef's famous Blackguard 'Micawber' wasn't fitted with a humbucker until 1972, so while it might be the most iconic example of its type, Robbie Robertson, Albert Collins, Bob Bain, Terry Reid and many others actually beat the Stones legend to it.

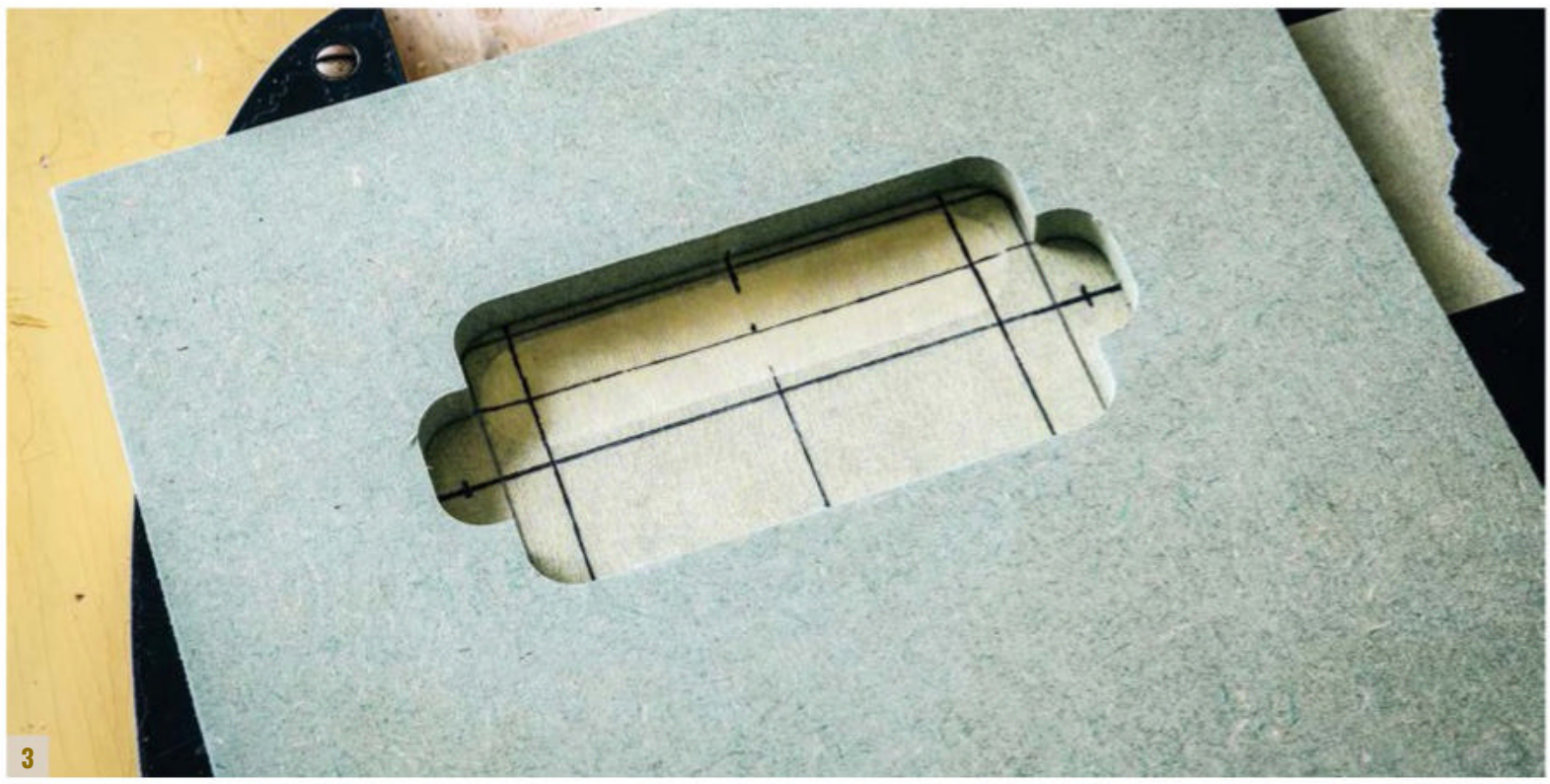
Back in the 1960s, players didn't modify their guitars all that much. Granted, they would often strip them, repaint them and perhaps add a Bigsby tailpiece. But hacking them up to install different pickups and trick wiring didn't become commonplace until the 1970s.

So why were Teles seen as fair game by Messrs Bain, Collins et al? At the risk of offending vintage purists, Telecaster wiring didn't get off to a fantastic start. Broadcasters and Nocasters all had the blend circuit and, in 1952, this was altered to provide bridge and neck pickup settings with a tone control, and a neck-only setting with a very pronounced treble roll-off. Compared to pretty much every other twin-pickup electric guitar, the Tele only had two usable sounds when it should have had three.

This wiring scheme lasted until 1967, so plenty of Tele players decided to rewire their controls. Combining both pickups provided timeless country and rockabilly tones. For power trios and early hard rock, however, some players found the little metal-covered Tele neck pickup sounded rather dull and weak. Many still do.

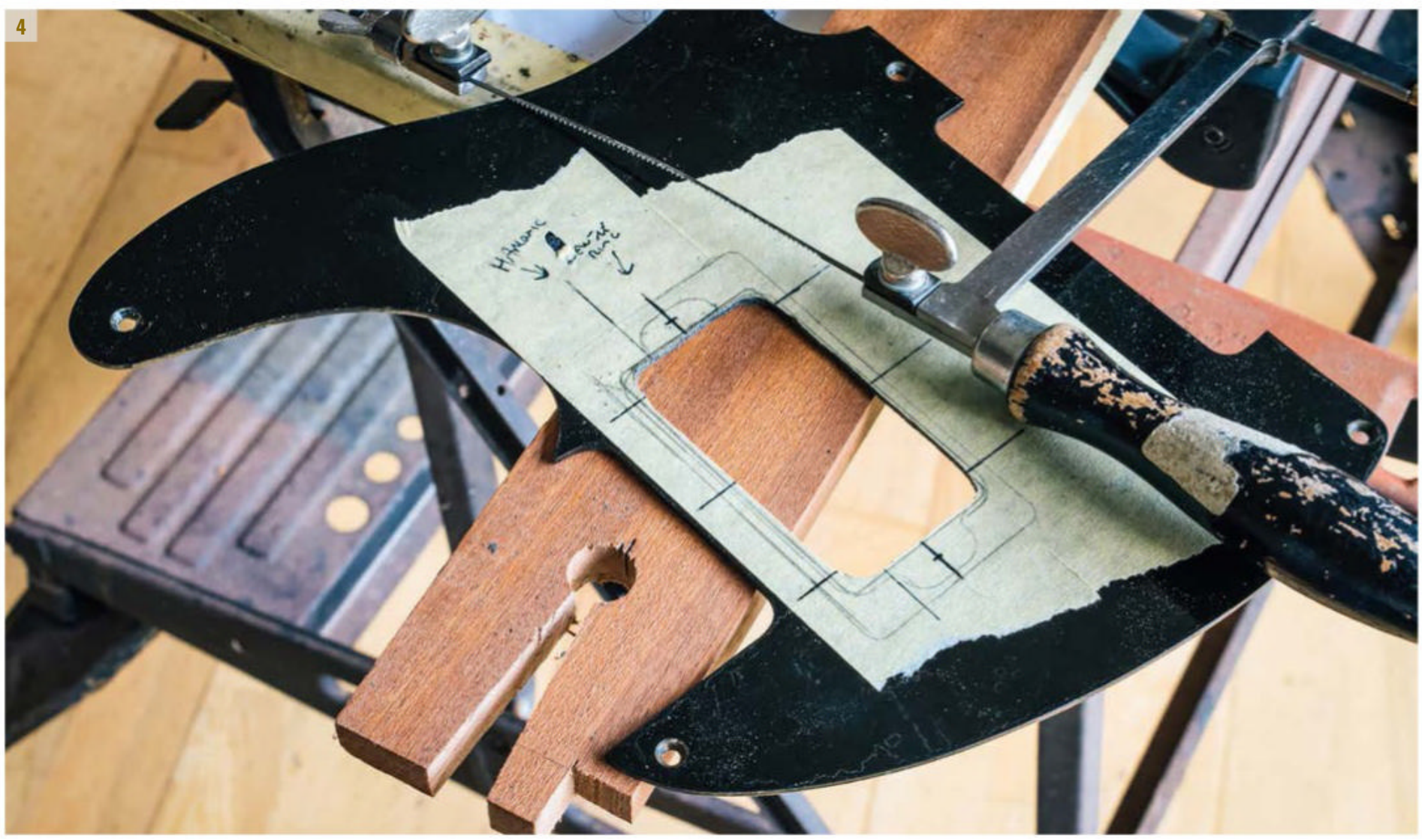
Fenders are easier to modify than most classic guitar brands and, if you make a mess of the woodwork, you can hide it under the pickguard. With a neck humbucker installed, you can enjoy a more varied tonal palette. For Bob Bain, it meant taking one guitar to a session rather than two. "I put a humbucker in the neck position because I might go to a studio and need a Chuck Wayne sound," he once told *Vintage Guitar* magazine. "I'd have a Gibson ES-150 with me and switch if I had to. But that meant I had to carry two electrics."

The owner of the guitar on our workbench today recently bought an original 1950s



3 The octave harmonic, pickup centre and centre line of the body have been marked and now the routing template is being positioned

4 Most of the pickup material is cut out using a jeweller's saw. Take care to cut inside the router template lines



Telecaster, so he decided that his luthier-built Blackguard replica was ripe for humbuckering. The guitar already has a 1953 Fender lap steel pickup in the bridge and here I'll be combining it with a Gibson patent number pickup from the 1960s.

GETTING STARTED

I'm using a humbucker routing template from eBay, as well as a pickup ring from allparts.uk.com and a bearing guided router bit from axminstertools.com. But before embarking on any irreversible modifications, I have to determine the precise position for the humbucker.

Check out Micawber and you'll see that the pickup ring is close to the neck and a sizeable area of the pickguard is missing. Clearly, very little wood survives between the neck pocket and the pickup cavity. I want to avoid that and decide instead to replicate the Bonamassa/Terry Reid look.

Stock Tele neck pickups are placed directly under the harmonic and I want the humbucker screw coil to line up in the same place. I begin by removing the bridge assembly and the neck pickup, then I reattach the pickguard and place masking tape over the top for easy marking.

The neck pickup slugs are 6.5 inches (165mm) from the 12th fret. I run a ruler along each side of the neck, draw straight lines onto the masking tape and then mark the 6.5 inches at each side and carefully draw a line to connect them. I also establish a centre line.

The gap between the centre of the pickup's pole screws and the pickup ring's outer edge is 0.5 inches (12.7mm) so I mark that location too. With the ring placed upside down on the pickguard, centred and aligned with the front mark, I draw around the outside and inside of the ring. With the exact location of the pickup ring established, I am now able to mark the position for my router template.

OPEN WIDE

The pickup ring will eventually sit on top of the pickguard but the neck pickup hole has to be enlarged. The router will refine the edges but I remove most of the material using a jeweller's saw, cutting just inside the router template markings.

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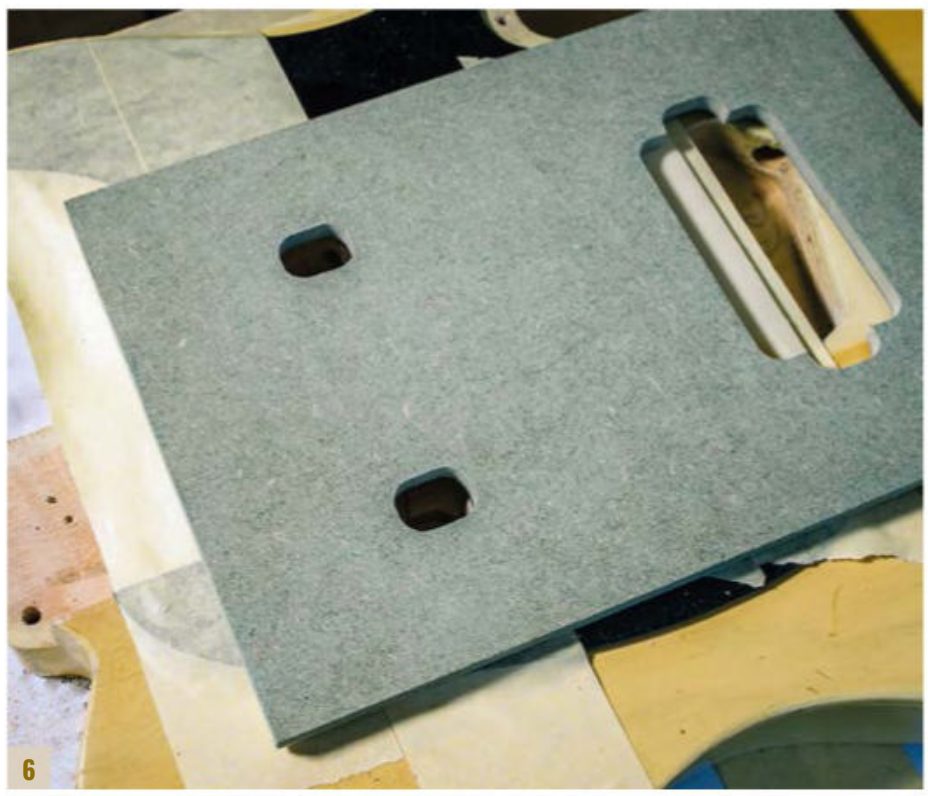

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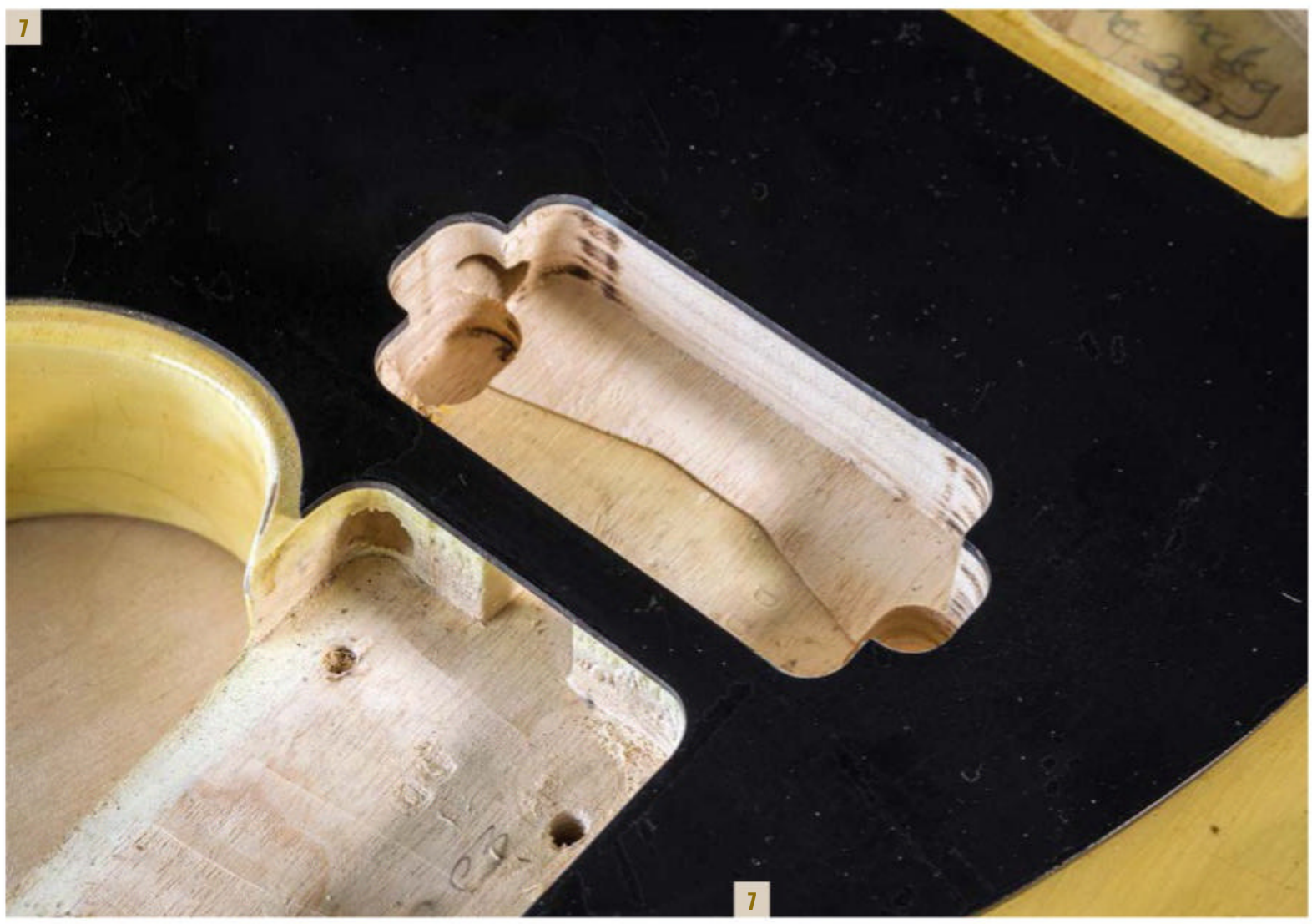
5 The pickguard is reattached to the guitar and the template is fixed on top using double-sided tape with the body firmly clamped down

6 Once the main cut-out is complete, the template is flipped around to deepen the ends of the hole for the brackets and screws

7 Routing the hole with the pickguard in place ensures everything lines up perfectly

8 The pickup fits perfectly so all that's left is the reassembly and rewiring



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Like original 1950s examples, this pickguard is fibreboard, but I'm able to saw through it easily. I mount the pickguard back onto the body and am ready to rout.

To secure the router template to the scratchplate, I cover the bottom of the template with masking tape and then apply double-sided carpet tape. It's extremely sticky stuff, and masking tape ensures the pickguard and template aren't damaged when the double-sided tape is removed.

As there's already a neck pickup cavity, I don't have to remove much wood. My router bit drops in with lots of room and I'm able to cut the wood and pickguard at the same time. I'm left with a neat hole and a perfectly aligned pickguard cut-out. But the hole is too shallow for the height-screw brackets.

The template also has two smaller holes that can be aligned over the full-size cut-out. I use them to cut a little deeper at each side of the rout to accommodate the brackets and height adjustment screws. This is quickly done and the scary part is complete.

BACK TOGETHER

Reassembly and rewiring is straightforward, although I have to solder a wire onto the humbucker's braided wire to connect it to ground. I also sand the underside of the ring to make it flat rather than slanted.

With the guitar strung up, I carefully align the humbucker so that the strings are passing directly over the pole screws. Masking tape holds the pickup in position as I drill pilot holes for the pickup ring screws and firmly secure the assembly to the guitar.

For the best balance with the stock controls, I'd suggest installing a relatively low-wind humbucker with a naturally bright tone, otherwise it may sound a little dull with a 250k volume potentiometer. And if you discover that your pickups are out of phase, the easiest solution is to flip the humbucker magnet.

I would never do this to a vintage Telecaster and even feel a twinge of guilt cutting into this fabulous guitar. But it's what the owner wants, and this is a classic combination because it really works, both sonically and aesthetically. All that remains now is to remove that low E string and tune to open G… G

THE GREAT GUITAR BUILD OFF 2021-

This year's competiton
will be split into
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AMPLIFIER FAQ

This month, Rift Amps head honcho Chris Fantana offers some much-needed love to a neglected classic

Have a burning question about your amp or, worse still, a burning amp? Email us at editors@guitar.com

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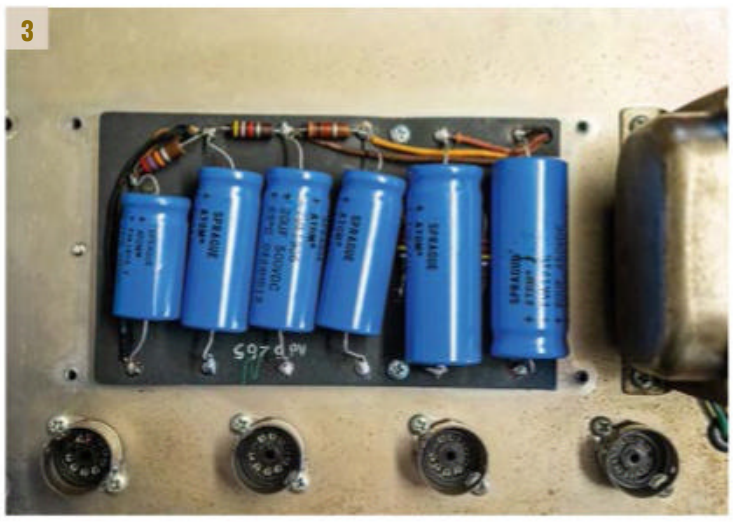

3

1 This 1960s Fender Bassman isn't sounding great so it's time to investigate

2 The blonde version of the Bassman was sold from 1961 to 1964

3 Poor repair work inside our black-panel amp has caused many problems

Introduced in late 1964 as the replacement for the short-lived blonde Bassman amplifiers – circuits 6G6, 6G6-A, and 6G6-B – the black-panel version featured a new circuit designed to offer a wider range of clean tones, with the now characteristic scooped sound that we associate with Fenders of the era.

The output valves were switched from 5881s to the new variant of the 6L6, the 6L6GC. The complement of transformers remained the same, with the output transformer retaining its 4.2k primary impedance. The phase inverter circuit was reconfigured around a 12AT7 instead of the 12AX7, which despite having a lower amplification factor allowed a greater voltage swing on each half of the output, further increasing output across the board rather than peak power.

Other circuit alterations included changes to the tonestacks found in both the bass and normal channels. The normal channel lost its 70 per cent tapped 350k log potentiometer found in the treble position and saw it replaced with a 250k log version that's still commonly used to this day.

Changes to the bass channel included amended capacitor values in the tonestack, the addition of a deep switch, and revisions to the gain stage operating points. Globally, the presence control was removed and negative feedback was increased.

UNDER THE HOOD

The example on my bench is not a museum piece but a well-used amp from which the previous owners have certainly got their money's worth. Unfortunately, it has a few issues that'll need sorting out before it's able to sing as it should. The customer has complained that it's incredibly gainy and suffers from excessive sag. Time to open it up, then.

I don't like to plug faulty amplifiers straight into the mains before giving them a full visual inspection. Experience tells me you're better to be safe than sorry,

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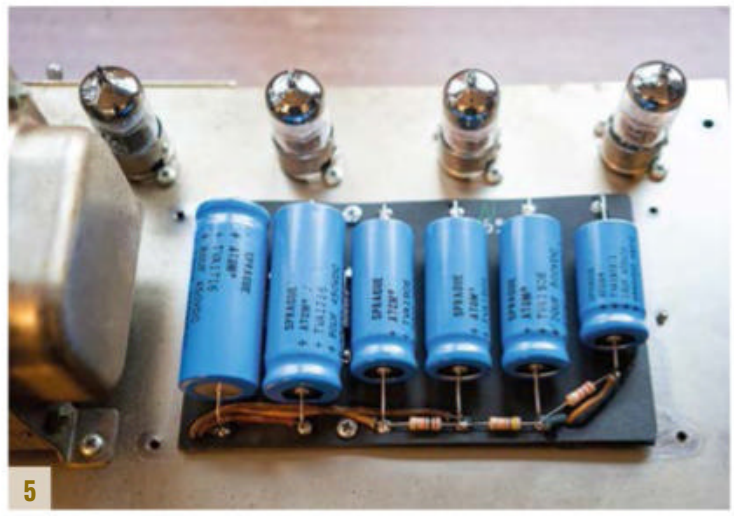

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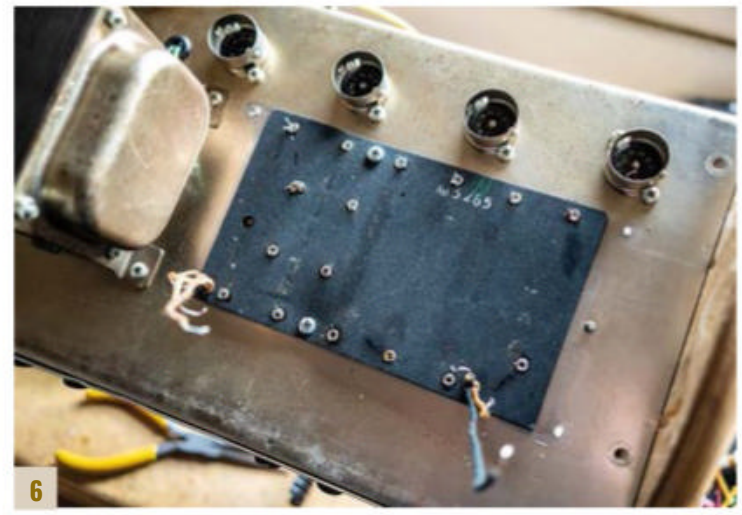

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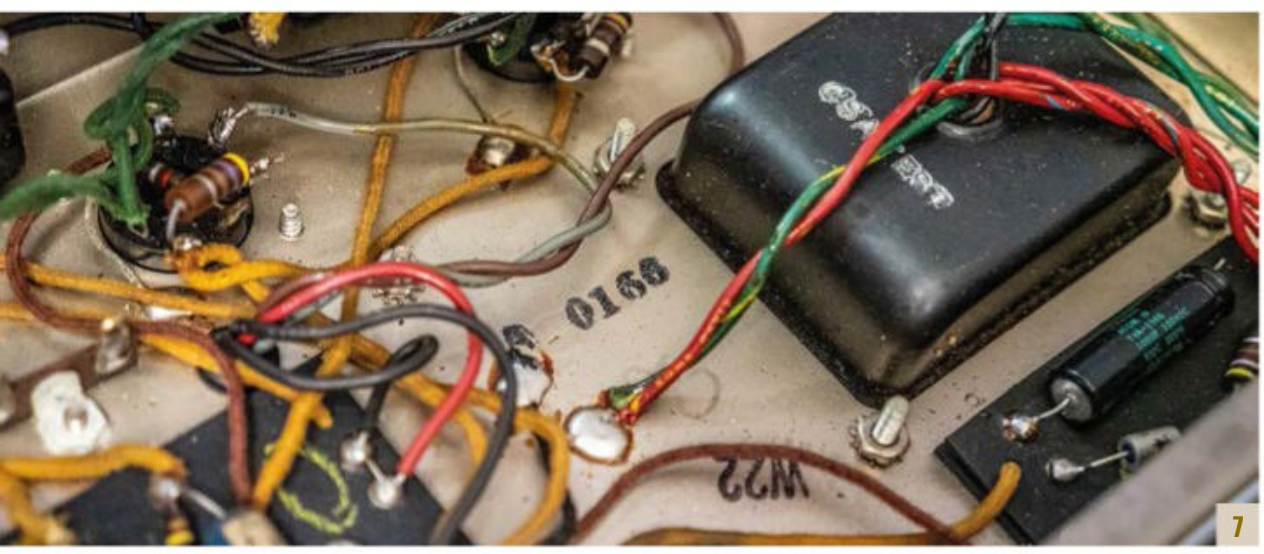

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especially with vintage amps. I was told that this was a 1965 model, circuit AA165, and the tube chart inside the cabinet confirms such, showing the code OI (O = 1965, I = September). However, I've seen many a vintage Fender for which the tube chart doesn't match the chassis, so let's keep digging.

The outside of the chassis is stamped with the serial number A16440, which Fender's own records tell us was allocated as a 1966 build. Inside the chassis, an ink stamp 0166 indicates that the chassis was wired in the first week of 1966. The transformers all date to late 1965, as do the potentiometers. The chassis could not have been built with components made after the fact, meaning that this chassis was, at the very oldest, born in January 1966.

There's another nail in the coffin for the Sept '65 theory, which is that this circuit is in fact designation AB165, owing to certain hardware, component values and configurations not found in the earlier AA864 and AA165 circuits. To complicate things further, in the past this amplifier has been converted to the earlier AA864 specification – but not entirely. This alteration mainly relates to the bias circuit, changing to a standard grid-bias network rather than the bias-balance circuit found in the AB165 and later silverface circuits.

FIXER-UPPER

Our visual inspection reveals a host of poorly executed repair work, shoddy soldering and general laziness when it comes to the repair and maintenance of a vintage amplifier. I notice that both the high-voltage filter stack and the mains supply require my immediate attention before I even plug in. Where's the soldering iron?

Beginning with the filter capacitors beneath the dog house, we can see that the originals were replaced some time ago with good-quality modern replacements. If you read the last instalment of this column, you'll know that electrolytic filter capacitors have a limited lifespan, so it's not uncommon to see replacements in an amplifier of this age. Unfortunately, the quality of the work here is not up to scratch, with poorly positioned capacitors, twisted leads and cold solder joints throughout. One solder joint is not even connecting the components (see image four).

We might as well do the job properly, so every component is unsoldered and removed from the board, tested and then replaced if necessary. At the same time, it's a good opportunity to remove the board itself from the chassis and clean, rewire and tidy up any issues.

Thankfully, the six Sprague capacitors all test as new on my high-voltage tester and can be reinstalled. There are five resistors on this board and they all have a tough job in the circuit, going through electrical abuse every time the amplifier is switched on and off. Each and every one has drifted out of tolerance, so new replacements are soldered in. The completed board, showcased in image five, looks much better, I think you'll agree.

Our next job is to rewire the mains cable to a safer specification, with the live wire connecting to the on/off switch via the mains fuse. Ideally, the neutral wire would be switched as well but in this case it is connected straight to the common side of the main's transformers primary winding.

The black-panel Bassman should have three 7025 (high-grade 12AX7) and one 12AT7 preamp valve, and this amp arrived on my bench with four 12AT7s instead. After swapping in the correct valves, I can now fire it up. Come back next month to find out how it sounds. G

Visit riftamps.com for more on Rift's range of British-built boutique amplifiers

4 This not-so solder joint is causing issues

5 The rebuilt board, with new components where required

6 The stripped board was also in need of a good clean

7 Our chassis was build-stamped during the first week of 1966

8 Vintage Fender tube charts are often mismatched to the chassis, as is the case here

1

TECH TALK

HOW TO SET PICKUP HEIGHTS

WORDS & PHOTOGRAPHY MICHAEL JAMES ADAMS

Many players replace their pickups before they've experimented with different height settings. Knowing how to do this could save you some money and unlock authentic shoegaze tones…

Pickup height adjustments can be frightening, especially if you've never done it before. Even tiny adjustments can have a huge effect on the overall sound and response of your guitar, from how hard it hits the amp to the balance of bass and treble frequencies, and even how one instrument stacks up against another.

If you've ever felt like your guitar was missing something or had too much of something else, or just wished to understand what you can do to improve your tonal situation, take heart! Let's go through the important steps together and you'll come out the other side ready to attack pickup height conundrums with confidence.

WHAT YOU'LL NEED

1 Your ears! These are the most important tools for determining what pickup heights work best for the way you play. Remember: there's no right or wrong, just what sounds best to you.

2 A screwdriver that matches the height-adjustment screws on your guitar. Phillips or flat, take your pick.

3 A tool equipped to measure the distance between your guitar's polepieces and its strings, such as my StewMac string action gauge, which has various markers etched onto its surface, including two-way rules in 64ths of an inch, which are perfect for tackling pickup heights.

4 A guitar. I mean, that bit should be obvious but, hey, it's good to be thorough. We're using my Jazzmaster for this demo.

A string action gauge, a suitable screwdriver and your ears are the main tools required for this job

5 A good amplifier, ideally one that you know well and use often. Knowing an amp intimately can be a boon, as it enables you to better use your ears to understand the way the amp and pickups interact with each together.

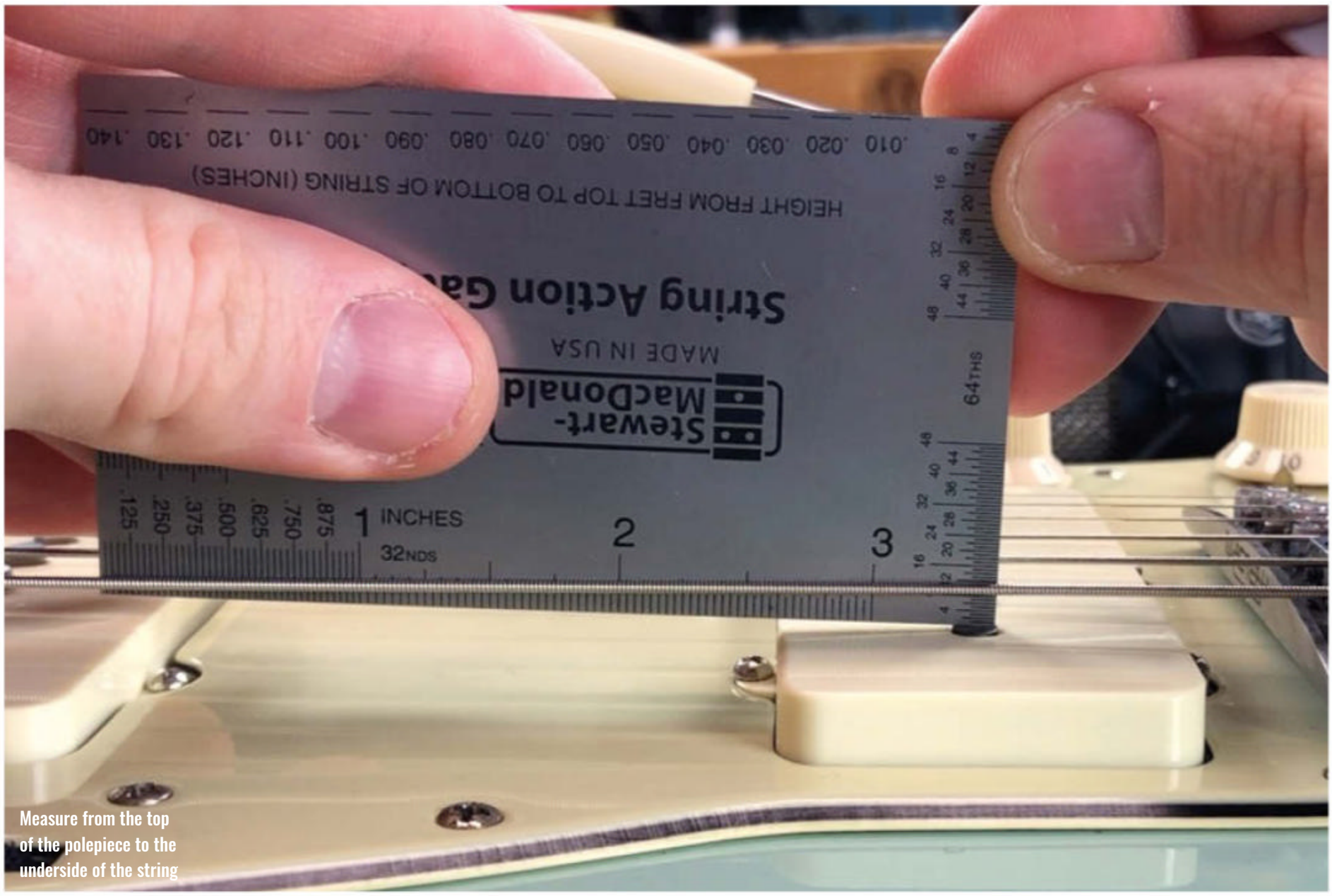
GETTING STARTED

Before you make any changes, be sure to take note of your current pickup height settings so that you'll be able to see just how much of a change you've made later. Having this baseline measurement will allow you to return to 'normal' if things end up spiralling out of control, with you vacillating from higher to lower over and over again until you've utterly lost the plot. Believe me, I've been there.

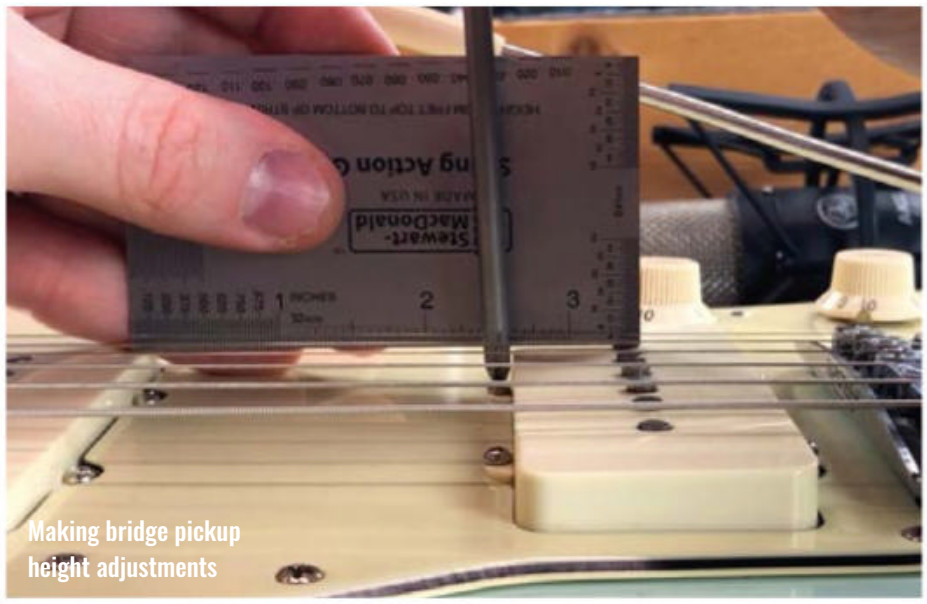
Measuring pickup heights is all about the distance from the strings to the pickup's polepieces, not their height from the body. To measure, take your rule and put it directly on the polepiece. Those little lines should tell you how far away they are from one another.

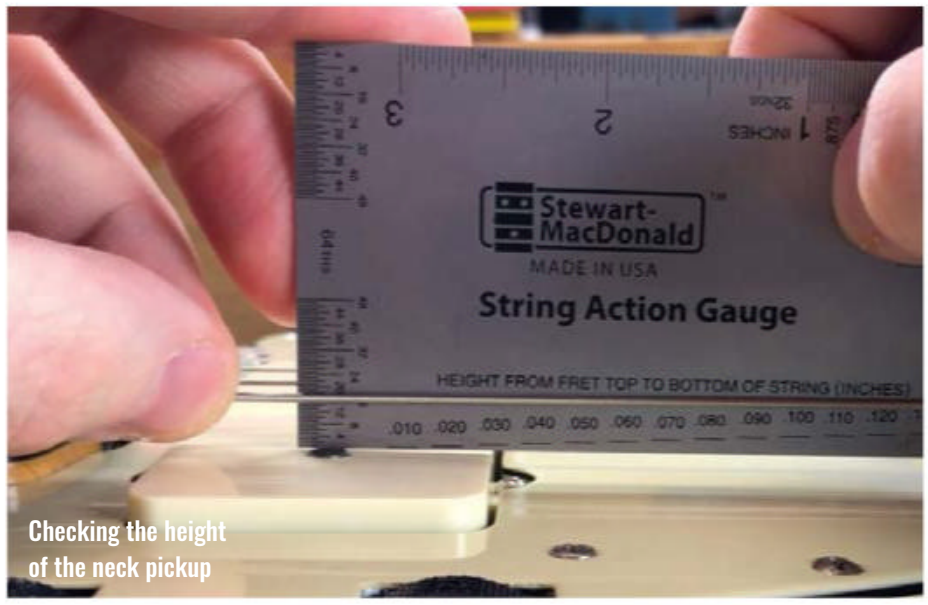
For pickups with non-adjustable poles, I tend to focus on the low and high E poles, taking note of the distance from each to their strings. For adjustable poles, it can help to measure them all if there are volume-balance issues from string to string. For this article, we'll stick with the pickups on my Jazzmaster, which has flat slug poles.

Fender factory specs for 'vintage single-coils' – which I think means Strat pickups, as I couldn't find specifics for Jazzmasters – are 6/64" on the low E and 5/64" on the high.



Measure from the top of the polepiece to the underside of the string


Making bridge pickup height adjustments



Checking the height of the neck pickup

My Lollar bridge pickup is 8/64" (1/8") from the low E and 7/64" from the high E. That's a little lower than factory spec but it sounds best to me. That slight angle is there so that the low and high E have the same volume, something that I generally do with all of the pickups on the guitars in my collection.

If I raise my pickup to factory specs, the sound is louder overall, with a little bump in the lows and more spiky on the highs. The extra power might be nice but tonally I just don't like it at all. Lower feels more balanced, a bit warmer and has an ample degree of clarity that makes those more aggressive high frequencies unnecessary.

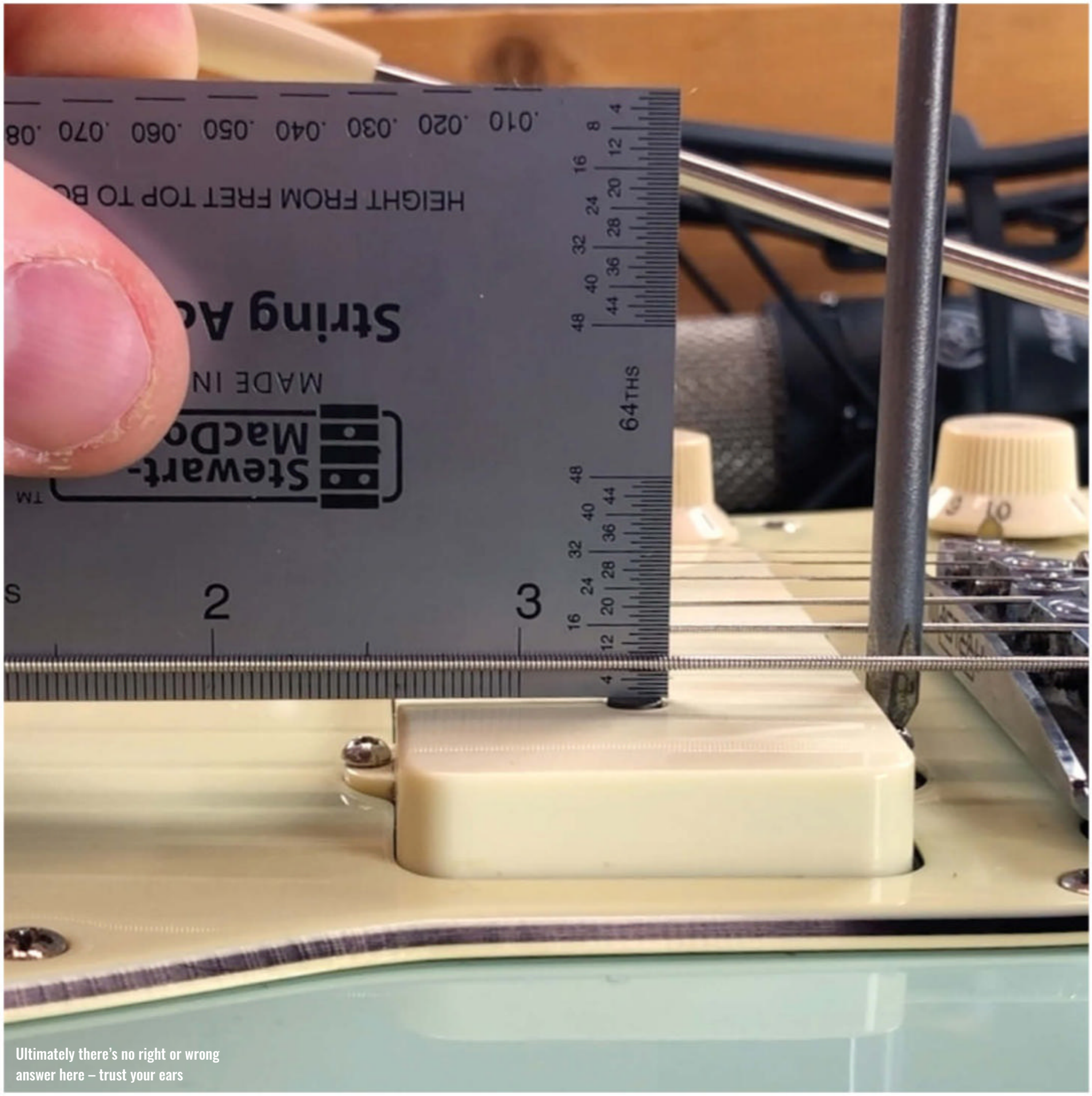
This is why using your ears is of such importance: what's technically 'correct' might not actually be beneficial for your needs as a player, and that's perfectly okay! More output and snap might be great for another player but for me it just doesn't work. My ears tell me everything I need to know and help me zero-in on the correct height for me.

Let's move on to the neck pickup. Due to their positioning, neck pickups sound boomier in the low end than bridge units. But it's important to consider the full range of sound rather than those loud low bass frequencies. Try to key-in on the brightness of the low strings rather than the roundness, otherwise you might just be tricked into believing the pickups are balanced when they are not.

I have my neck pickup set to 12/64" on the low E and 9/64" on the high E and it's just a tad quieter than the bridge unit. This is another personal preference of mine, as I'm primarily a bridge-pickup player, but it also sweetens the middle position. With both pickups on, the neck being slightly lower reduces the bass and emphasises the upper mids in a way I really like.

Every pickup's magnetic field has a window where it best senses the string, and that's likely where the factories are coming from when they determine those specs. Let's talk about when having the pickup height out of spec can work out well for certain genres.

Shoegaze bands, with their fondness for volume and blazing spaced-out fuzz tones, have had a huge effect on music as well as myself personally. What I've noticed from working on so many offset guitars for shoegaze bands is that some players prefer to have their pickups adjusted low in the body.



Ultimately there's no right or wrong answer here – trust your ears

This puts the pickups way out of spec but doing so actually forms a key ingredient in their sound.

I think this idiosyncrasy may actually be the result of the deteriorated pickup foam that often plagues all-original vintage Fender Jazzmasters and Jaguars. With enough time and exposure to sweat, the foam beneath the pickups and on the Jaguar's mute plate eventually turns into a thick, hard goop that leaves a stubborn stain on anything it touches.

In case you've never had the displeasure of dealing with one, these bits of old foam compress and, as such, become completely useless. And because they no longer spring back, the pickups sink deeper into the body, leading many to believe that the pickups were simply meant to be that low.

What I think happened is that, at the inception of the shoegaze genre, the foam was already going bad, so when shoegaze players gravitated toward vintage offset guitars, they didn't question those pickup specs. Instead, they found a sound that worked out great for them.

LET'S TRY IT

With my bridge pickup set to 13/64" bass and 12/64" treble, and my neck to 15/64" bass and 3/16" treble, the guitar lacks a lot of the output that I expect. The pickups are unbalanced, with a much louder neck pickup and a somewhat anaemic bridge. But I have to admit that plugging in with the middle position selected and my Keeley Loomer engaged, suddenly something just clicks for me.

I feel like I'm inside my favorite shoegaze records, and the power of the middle position is really incredible. Having the pickups so far out of adjustment really allows you to tailor the frequencies that are cancelled out, along with the hum of the parallel middle position. Truly, I'm floored. If I ever find myself in another glide guitar situation, I'm going to slam my pickups straight down into the body.

So when you're experimenting with your own pickup heights, try starting with your factory recommended specs and lowering them until you're happy. Use your ears, try not to take the numbers as gospel and remember: when you're crafting your guitar sound, 'wrong' can be very, very right. G

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FIVE MINUTES TO...

KURT COBAIN

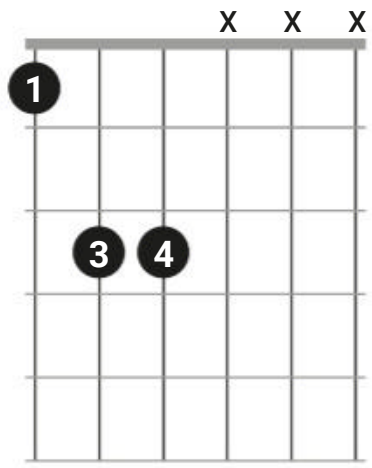
WORDS LEIGH FUGE

In the first of a new series, in just five short minutes we'll show you the technique secrets that helped the world's most influential guitarists stand out from the crowd. First up, it's Nirvana legend Kurt Cobain

Few guitarists have played with more abandon than Nirvana frontman Kurt Cobain. While the grunge idol was no technician, there's still plenty we can learn from his creative and impassioned playing style. If you want to get to grips with his white-knuckle approach to guitar, grab your Boss DS-1, crank up the gain and let's go very ape indeed.

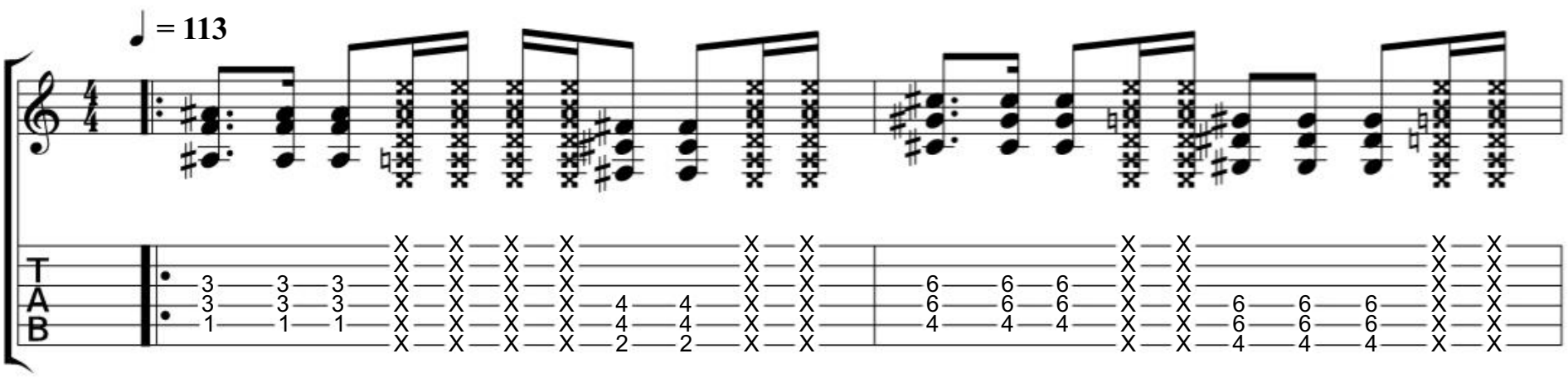
EXPLOSIVE POWERCHORDS

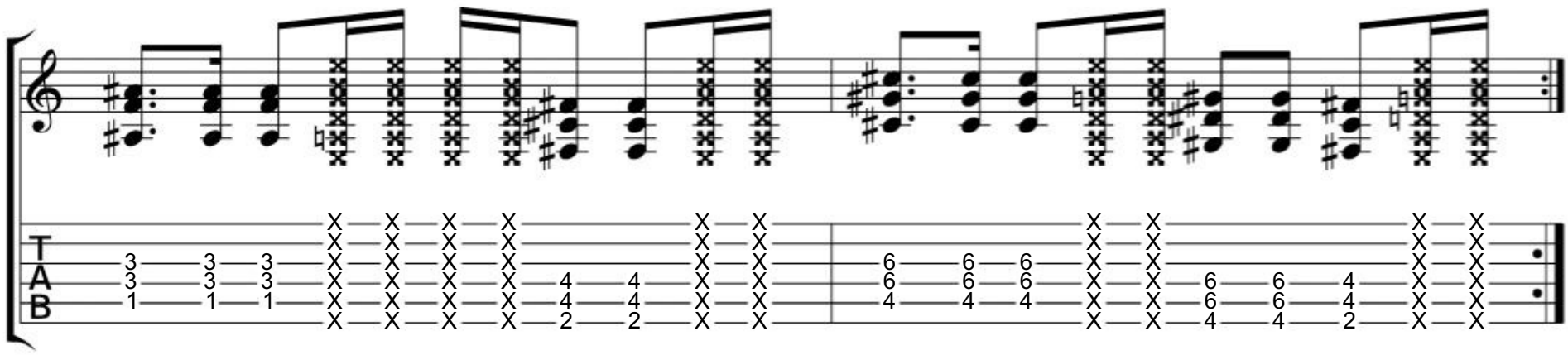
The central ingredient to Kurt Cobain's rhythm guitar playing is the humble powerchord. This three-note chord will form a core tool as you dig deeper into Kurt's guitar style. The shape is transposable all around the neck of the guitar and is made up of just three notes. Kurt often used his third finger to barre across the fifth and octave notes but you can use your third and fourth fingers if you prefer to.



PERCUSSIVE STRING MUTES

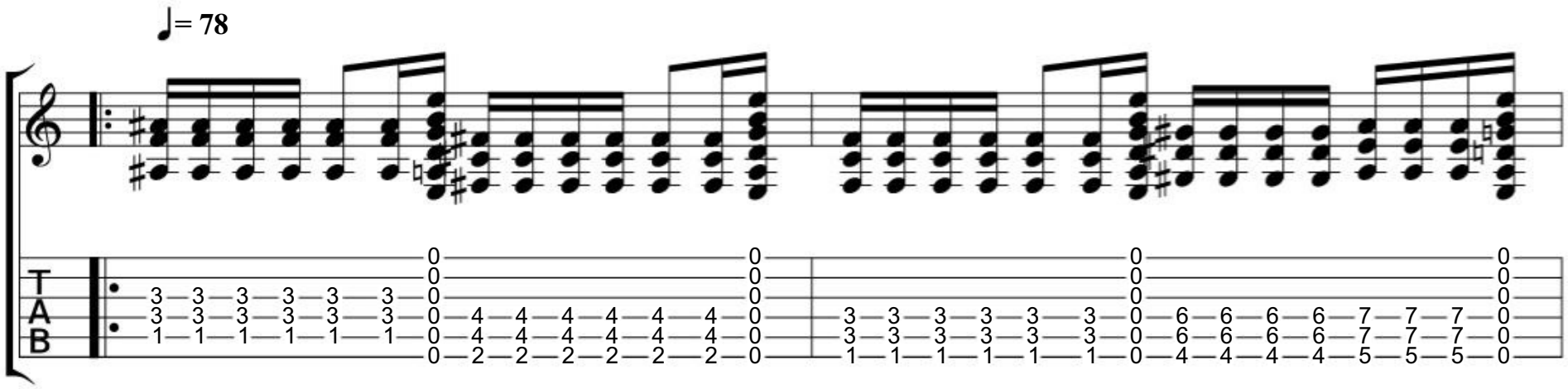
A fantastic way to inject some instant Cobain into your playing is to add muted notes around existing chords. When played with distortion, you may also hear the occasional harmonic as you mute the strings, which will only add to the grunge vibe.

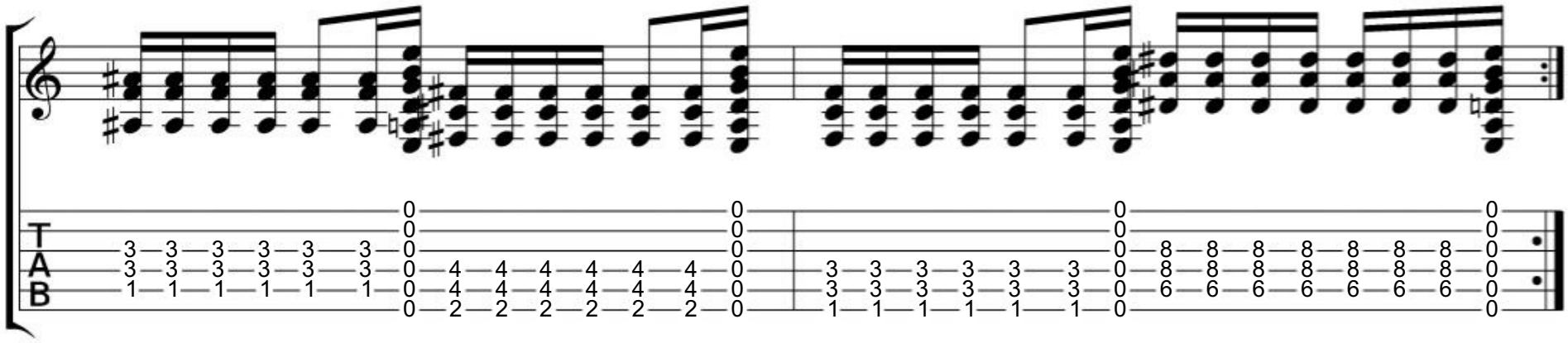




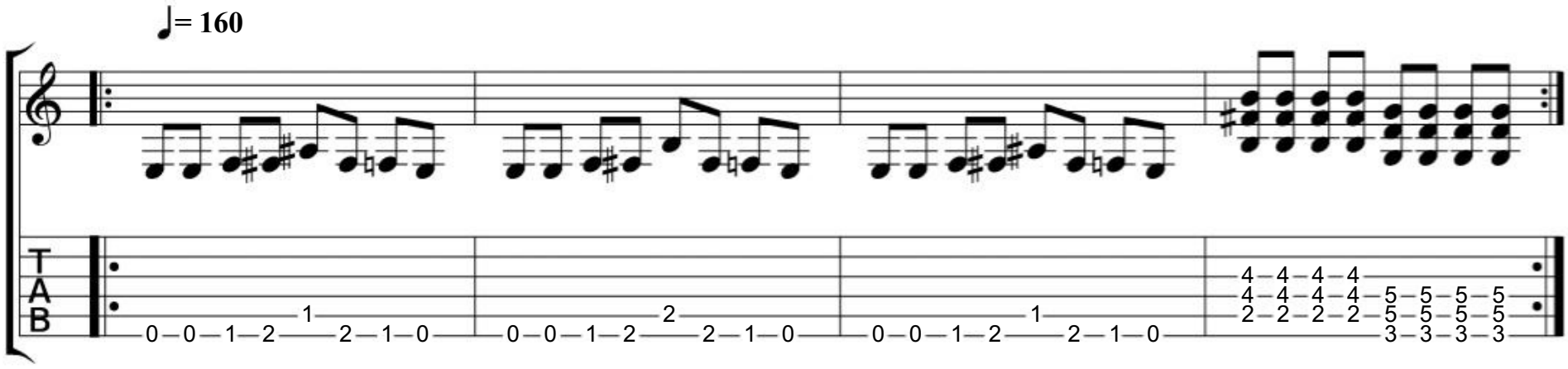
OPEN-STRING TRANSITIONS

Fast chord changes not your strong suit? No need to worry. Here's a technique that can help you hot-swap between powerchords and buy yourself a little time in the process: open-string hits. Moving between these doesn't need to be super-accurate. Think of them as accidentals that Kurt would use to connect chords. They can sometimes come across as slightly dissonant but this is grunge – that's what you want.





CHROMATIC RIFFS

When deployed cleverly, chromaticism can be a satisfying shortcut to crunchy, chaotic riffs. This early Nirvana-style lead-in demonstrates how short chromatic phrases can be used to create cascading motifs that crop up again and again throughout your track.

Leigh Fuge is a guitar teacher and professional musician from Swansea in the UK. He has taught hundreds of students face to face and via the MGR Music platform. He has more th an 10 years of experience working in the industry as a touring musician, session guitarist and teacher. To find guitar tutors in your area, visit mgrmusic.com

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CHORD CLINIC

HOW TO PLAY CHORDS LIKE GEORGE HARRISON

WORDS ROD FOGG

The 'quiet one' did his talking with his guitar and, while the shadows of Lennon and McCartney loomed large, George Harrison more than demonstrated that he had a songwriting genius all of his own

Initially George Harrison found it hard to make his songwriting voice heard, seldom contributing more than one or two songs to each Beatles album. But as the band's work progressed, it became clear that he was also an original talent, coming up with classics such as *Taxman*, *Something*, *Here Comes The Sun* and *While My Guitar Gently Weeps*, to mention a few.

As The Beatles' 'lead guitarist', his parts tend to focus on high-position chords or riffs that work in support of the harmony. Many of his own songs were inspired by classical Indian traditions and tend to eschew chord changes in favour of drones. However, Harrison certainly knew how to put together a classic chord sequence and was adept at coming up with fascinating guitar riffs and parts to fit his songs. Enjoy experimenting with these chord sequences and we'll be back next month with more Harrison-inspired harmony.

Rod Fogg is a London-based guitarist, teacher and writer. He is the author of *The Ultimate Guitar Course* (Race Point 2014), *The Electric Guitar Handbook* (Backbeat, 2009) and contributed to bestseller *The Totally Interactive Guitar Bible* (Jawbone Publishing, 2006). Find out more at rodfogg.com

FIGURE 1

The first four chords here give you a repeatable four-bar sequence, for which you could try staying on G for two bars during the second loop. Harrison might add interest to a sequence like this by adding and removing his fourth finger, creating a riff around the A and D strings on each chord. The last two chords can be used in a B section or chorus and are suggestive of the high-position chords that Harrison would often play to add accents to Lennon's rhythm guitar.

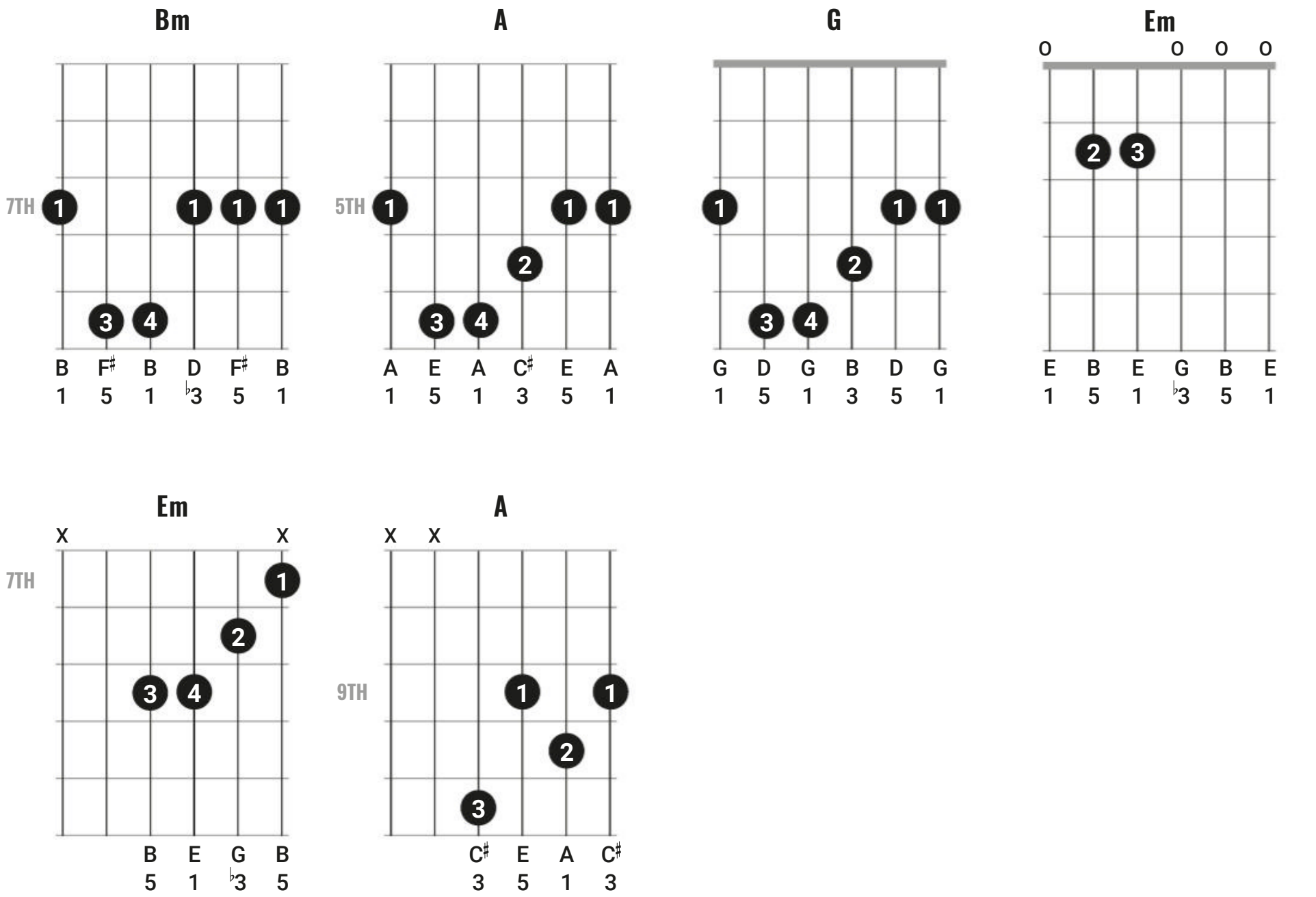


FIGURE 2

This example is a cross between a chord sequence and a riff. The open A string in the bass is there to give the phrase a tonal centre but it's up to you whether you play it or not. It would be played over an A major chord in the rhythm part. This is the kind of thing Harrison would play in the gaps of the vocal lines and is an excellent example of his ability to play for the song, avoiding guitar heroics in favour of serving the material. Just for fun, though, why not chuck in some deep, pulsing tremolo?

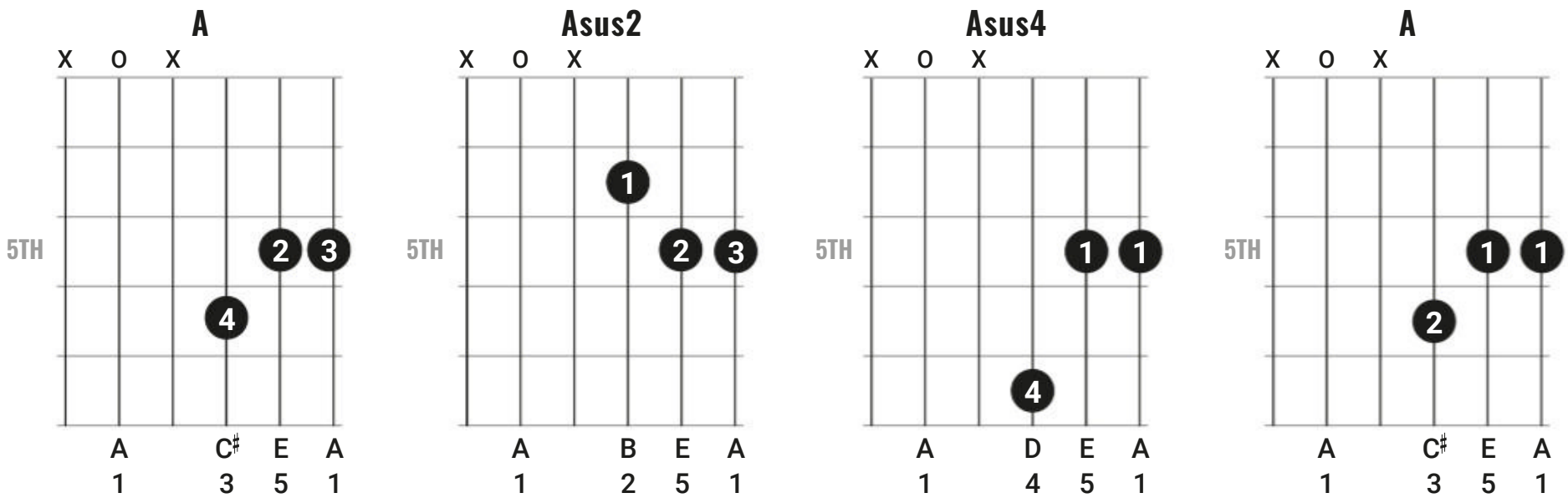


FIGURE 3

Harrison would often use a capo at about the seventh fret to add sparkle to chords and single-note lines. Here, we have a sequence based around different versions of a D major shape (which will give you an A major chord when capo'd up) and a few bars of a C shape, giving you a G major chord. Try playing arpeggios or picking around the high notes of the chords while adding the notes on the D string or G string in between.

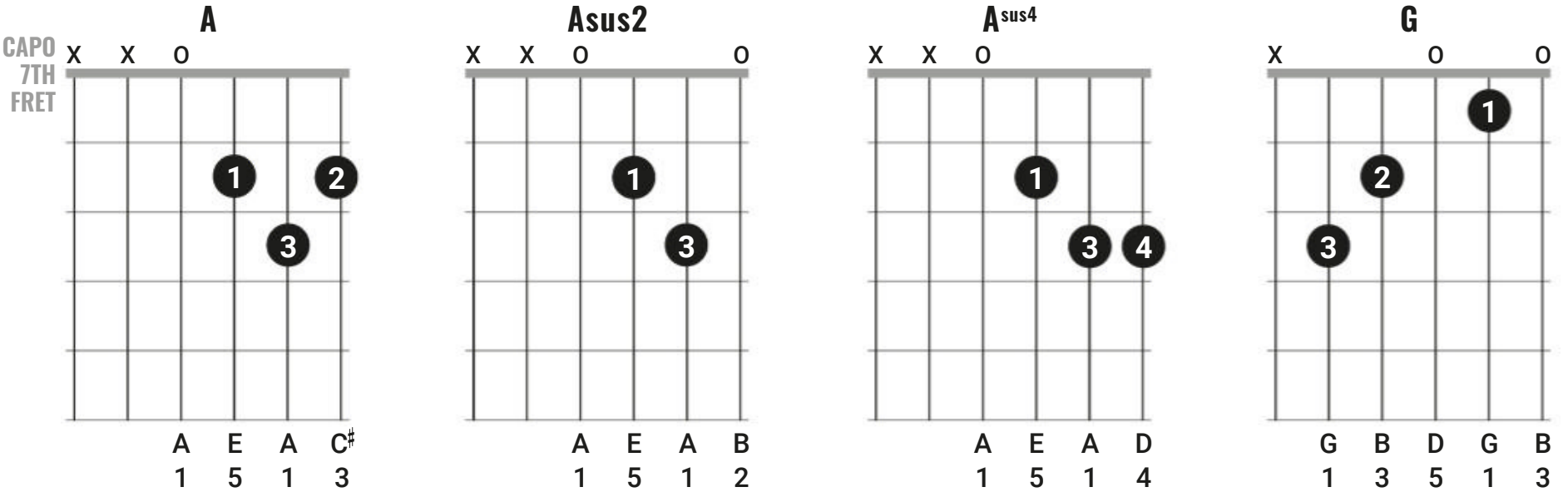
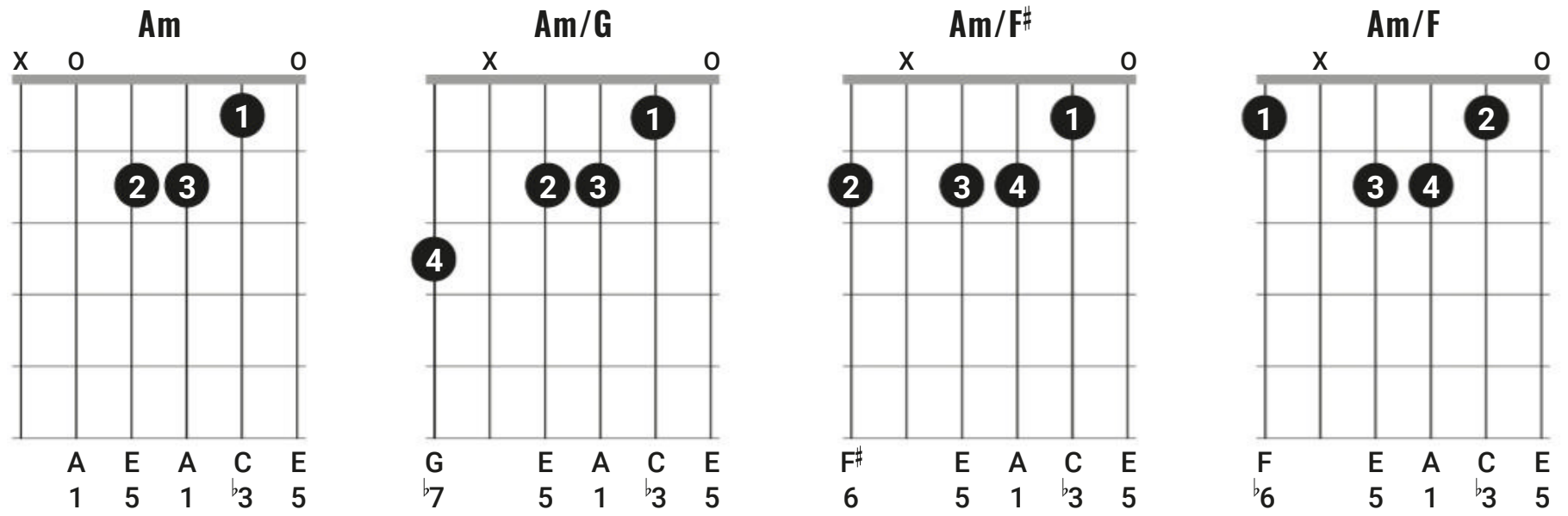


FIGURE 4

Harrison's role in The Beatles was chiefly to add colour and interest, which he did by coming up with guitar parts based on the upper notes of chords or on connecting riffs. Here, however, we've included an example of strummed acoustic guitar, as a solemn bassline descends from A minor with a series of slash chords. See if you can find some chords to go with it and broaden it into an eight-bar phrase. Ending on E, the dominant chord in A minor, would help make your sequence repeatable.



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TALKBOX

JAY LEONARD J

INTERVIEW SAM ROBERTS

The Canadian player is best known for his esteemed YouTube channel but he's also an accomplished session musician, a bona fide Buddy Holly superfan and a Bigsby aficionado

The moment it all started...

"When I was a kid, my aunt made a mixtape that featured – among her choices of mostly slick 1990s pop tunes – *Peggy Sue* by Buddy Holly. That track completely changed my life. All my first solos were Buddy Holly solos and he became such a guitar hero for me that I even ended up naming my daughter Holly."

I couldn't live without my...

"I have an original blonde 1968 Fender Telecaster with a factory installed Bigsby tailpiece. Every major moment of my music career was achieved with that guitar and the two of us have been through almost everything together."

The one that got away...

"It's not a guitar but, when I was younger, I traded my entire pedalboard – including an original Electro-Harmonix Russian-era Big Muff Pi – for a Boss ME-8 digital multi-effects pedal. I still wake up with nightmares about that one."

My signature model...

"I have associated myself with Tele-style guitars equipped with Bigsby tremolos, so it would definitely be in that direction. Here are three mods to make any Bigsby Tele awesome:

1 Locking tuners: your tuning and restringing time will thank you.
2 Mastery Bridge: those things are absolute magic. The RSD bridges Fender puts on their Custom Shop Jazzmasters are awesome too.
3 Drill holes where those Bigsby stringing nibs are: now you can thread your strings though those holes and restringing will be a lot less annoying."

The first thing I play when I pick up a guitar...

"Something in B minor. Is it just me or is that the funkiest of all keys?"

The best advice I've ever been given...

"The best way to break into the music scene is to show up to other people's gigs. Successful musicians support each other and you'll be surprised how quickly you get noticed and integrate into the community."

My Spinal Tap moment...

"I was the guitarist on Sandy Lam's 2012 world tour and we filmed the concert movie at the Hong Kong Coliseum. Unfortunately, the stage lights they used made my pickups roar with the nastiest 50 cycle hum I've ever heard. It was fine for most of the show but there was one tune – the slow soulful ballad – where I had to circle around this huge stage doing these little emotional bluesy licks. I felt like Indiana Jones walking on those stone blocks in *The Last Crusade*. I had to contort my body in all these awkward ways to avoid hitting a hum hotspot, looking more like a snake having spasms than rock star. If you watch the final film, you can actually catch a few hum spots in the tune where I overstepped my mark. Oops."

My guilty pleasure...

"I like to hide little bits of obscure pop song riffs into my guitar parts. Sometimes a band member will catch me doing it, leading to that song going down some very entertaining rabbit holes."

I'm in the band...

"I'd love to be in the *Saturday Night Live* Band. Any cast, any era."

I wish I was there...

"I had *The Last Waltz* on constant rotation back when I was in college. Intimate venue (they even got served thanksgiving dinner), stacked artist roster and a huge amount of emotional investment from everyone on stage and off – that show is one of the great moments in rock history and a microcosm of everything I love about music."

The first thing on my rider...

"Have them install one of those virtual golf practicing booths in the green room. If I am not holding a guitar, I am usually holding a golf club."

If I could just play one thing...

"I've always wanted to play guitar like Django Reinhardt. He has such a playfully carefree approach and his feel is absolutely untouchable. *Nuages*, in particular, always lights me up like an illegal firecracker. Years ago, I bought this big heavy book of Django transcriptions and, when I make it to my golden years, I'm going to buy one of those Selmer Maccaferri-style guitars, grow a pencil moustache and start working my way through that book." G

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